

Lord Corporation
Chemical Products Group
2000 West Grandview Blvd.
P. O. Box 10038
Erie, Pa. 16514-0038
Telephone: 814:868-3611
Telex: 91-4445



SDMS DocID

DocID 223612

Metro Container Corp. P. O. Box A Trainer, PA 19016

February 18, 1987

Gentlemen:

Attached are the Material Safety Data Sheet (MSDS) form(s) you recently requested on:

TYCEL 7914

The MSDS form(s) on each of our product(s) is an essential part of the new OSHA Communication Standard (29CFR 1900.1200) which has an effective date of November 25, 1985. The information on the form(s) will help provide you with the information you need to establish a training program and maintain records to provide a safe workplace environment under the OSHA Standard.

If you have any questions or concerns regarding this standard and the use of our MSDS form(s), please contact us immediately.

Sincerely,

D. H. Green

Douglas H. Green, Manager Business Services Department

/slh

Neto Container Corps

DATE			THE DATA SHEET	ORIGINAL
	REV MSDS NUM	BER COMPILED	BY APPROVED	ikodi .
08/29/85	LA 80	E. C. Gustin	D. H. Green	, or
	PROC	OUCT IDENTIFICATION		•
TYCEL 7914 U	re thane Adhesive			PRODUCT CLASS
				Adhesives, Laminatin
MANUELO			TION I	
	JAPAKE22: SAMO I	Cal Products Group West Grandview Blue	EMERGENCY TELEPHON	IE NO.: 814-763-2345 (State "EMERGENCY" - Ask fo
CITY, STATE A	NND ZIP COOE: Erfe	Box 10038 PA 16514-0038	INFORMATION TELEPHON	"Safe ty Engineer") E NO.: 814-868-3611 (Ask for "Business Services")
		SECTION II - HA	ZARDOUS INGREDIENTS	
Chemical Nam	INGREDIENT e Common Name	PERC		LEL VAPOR PRESSU
Ethyl Acetate	Ethyl ethanoate	141-78-6 40	400ppm 1400mg/M ³ (THA-ACGIH & OSHA)	(\$ by Yo1) (mm Hg) 2.2 76/20°C
Free Methylene Bisphenyl Isocyanate	MDI	101-68-8 < 2	.02 ppm 2 mg/M ³ Cefling (ACGIH)	Mot <.01/20°C Applicable
OTI THE DAVIS	160_17200 76.70	SECTION III - C VAPOR DEN		Ma
VAPORATION RAT	E: Faster	AND ON DEM		- arange aidil Mi
VAPORATION RAT	E: Faster	AND ON DEN	ther PERCENT	VOLATILE BY VOLUME: 46 ER GALLON: 8.7
VAPORATION RATE	TE: Faster TR: Yes	x Slower, than Et	ther PERCENT WEIGHT P	VOLATILE BY VOLUME: 46
VAPORATION RATE OLUBLE IN WATE	R: Faster R: Yes	X Slower, than Et No ECTION IV - FIRE AND Flammable Liquid - (ther PERCENT WEIGHT P EXPLOSION HAZARD DATA	VOLATILE BY VOLUME: 46
BOILING RANGE: EVAPORATION RATE COLUBLE IN WATE LANGUABILITY CL. ASH POINT:	E: Faster R: Yes S	X Slower, than Et	ther PERCENT MEIGHT P EXPLOSION MAZARD DATA Class IB DOT _F1	VOLATILE BY VOLUME: 46 PER GALLON: 8.7 annuable Liquid
OLUBLE IN WATE AMMABILITY CL. ASH POINT:	R: Faster R: Yes	X Slower, than Et No ECTION IV - FIRE AND Flammable Liquid - (LEL: 2.2 Alcohol	EXPLOSION MAZARD DATA Class IB DOT F1 UN 11:	VOLATILE BY VOLUME: 46 ER GALLON: 8.7 ammable Liquid 33 Adhesive, Flammable
CAPORATION RATE CLUBLE IN WATE LAMMABILITY CL. ASH POINT: CTINGUISHING ME USUAL FIRE AND rks and open f	R: Faster R: Yes	X Slower, than Et X No ECTION IV - FIRE AND Flammable Liquid - (LEL: 2.2 Alcohol X Foam Keep containers tighters may explode when	EXPLOSION MAZARD DATA Class IB DOT F1 UN 11: CO2 x Chemical	VOLATILE BY VOLUME: 46 ER GALLON: 8.7 ammable Liquid 33 Adhesive, Flammable Water Halon x Fog x 1211 heat, electrical equipment.
VAPORATION RATE CLUBLE IN WATE AMMABILITY CL. ASH POINT: TINGUISHING ME USUAL FIRE AND rks and open f	R:	X Slower, than Et No ECTION IV - FIRE AND Flammable Liquid - (LEL: 2.2 Alcohol X Foam X Keep containers tigh ners may explode when trogen oxides, monome	EXPLOSION MAZARD DATA Class IB DOT F1 UN 11: CO2 x Chemical Itly closed. Isolate from exposed to extreme heat.	VOLATILE BY VOLUME: 46 ER GALLON: 8.7 ammable Liquid 33 Adhesive, Flammable Kater Halon x Fog x 1211 heat, electrical equipment.

SI10-8000-1

SECTION V - HEALTH HAZARD DATA
EFFECTS OF OVEREXPOSURE: ACUTE (Short Term): Anesthetic. Irritation of the respiratory tract or central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma.
CHRONIC (Long Term): Permanent central nervous system changes can occur due to solvent exposure.
MEDICAL CONDITIONS PROME TO AGGRAVATION BY EXPOSURE: Respiratory allergies. Chronic diseases of the skin, eyes throat and lungs.
PRIMARY ROUTES OF ENTRY: Dermal x Inhalation x Ingestion
EMERGENCY AND FIRST AID PROCEDURES: INHALATION: Move person to fresh air. Restore breathing. Treat symptomatically. Consult a physician. SPLASH (EYES): Flush eyes immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment. INGESTION: Drink one or two glasses of water to dilute. Do not induce vomiting. Consult physician or poison control center immediately. Treat symptomatically, INHALATION: Remove person to fresh air.
SECTION VI - REACTIVITY DATA
STABILITY: Unstable _x Stable HAZARDOUS POLYMERIZATION: May Occur _x Will Not Occur
CONDITIONS TO AVOID: High temperatures.
INCOMPATIBILITY (Materials to Avoid): Ammonia, halogens, acids, caustics, amines, materials containing reactive hydrogen sites.
SECTION VII - SPILL OR LEAK PROCEDURES
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid breathing vapors. Use self-contained breathing equipment. Yentilate area. Contain and remove with inert absorbent material and non-sparking tools.
WASTE DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), State and Local regulations. Before attempting clean-up, refer to hazard caution information in other sections of the MSDS form. Use licensed hazardous waste disposal concern.
SECTION VIII - SAFE HANDLING AND USE PROCEDURES
RESPIRATORY PROTECTION: Use approved chemical filtering respirators designed to remove organic vapor.
VENTILATION: Sufficient ventilation, in pattern and volume, should be provided to keep the air contaminant concentration below applicable exposure limits. Heavy solvent vapors should be removed from the lower levels of work area, and all ignition sources (non-explosion proof equipment) should be eliminated if flammable/air mixture will be encountered. All application areas should be ventilated in accordance with OSHA regulation 29CFR Part 1910.94.
PROTECTIVE GLOVES: Use neoprene or rubber gloves to prevent skin contact.
EYE PROTECTION: Use safety glasses with side shields as minimum protection.
OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Discard contaminated shoes. Use protective cream if skin contact is likely.
HYGIENIC PRACTICES: Wash hands before eating, smoking or using the wash room. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored.
SECTION IX - SPECIAL PRECAUTIONS
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Do not store or use near heat or open flame. Refer to OSHA 79CFR Part 1910.106 for specific storage requirements. Keep closure tight and container upright to prevent

OTHER PRECAUTIONS: Drums of this material should be grounded and bonded when pouring. Empty drums should not be reused. Prevent prolonged or repeated breathing of vapor or spray mists. Do not handle until the manufacturer's safety precautions have been read and understood. Do not weld or flame-cut an empty drum. Can cause allergic respiratory reaction. Do not get in eyes.

leakage.

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

ORIGIAL

(Red)

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO) BORON OIL COMPANY BP OIL INC. Midland Building

FROM WITHIN OHIO: FROM OUTSIDE OHIO: 800-321-8642

800-362-8059

CHEMTREC (CMA):

800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil

Cleveland, Ohio 44115

CAS REGISTRY NO.: Mixture

SYNONYMS: Internal combustion engine oil for engines burning heavy fuels

FORMULA: Refined petroleum oil plus additives

CHEMICAL FAMILY: hydrocarbons COMPOSITION: Solvent refined paraffinic base oil and naphthenic coastal base oil blend plus methacrylate polymer pour depressant, calcium phenate, and a calcium sulfonate, zinc dithiophosphate, succinimide combined inhibitor/detergent/dispersant package. The blended oil

contains not more than 0.2% zinc, 0.2% phosphorus, 1.5% calcium.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m³ TLV (8 hour time weighted average exposure; OSHA 29 CFR 1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and er. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO NUT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPO-SURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 680°F

POUR PT .: 0°F

VAPOR PRESSURE: @ 100°F: Negligible

VAPOR DENSITY (Air=1): Heavier than air

SPECIFIC GRAVITY: @ 60°F: 0.910

SOLUBILITY IN WATER: Negligible

PERCENT VOLATILE: @ 100°F: 0%

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Dark clear and bright liquid with petroleum odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 430°F AUTOIGNITION TEMP .: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

ORIGINAL. (Red)

 \Diamond 1000

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pressure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide from combustion. Reactive volatile hydrocarbons from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may be put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 65.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level.

Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. Have needed protective equipment and fire extinguisher available. Check operations for posple ignition sources.

DisrOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO.: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/6/81

REPLACING DATE OF: New Issue

PRODUCT CODES: P 3443, P 3444

REVIEWED BY: | /PJFXWMD/ECP/RAR/CWS/WJW/SMD

APPROVED: U

TITLE: Product Safety Coordinator

MATERIAL SAPETY DATA SEEET

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO)

BORON OIL COMPANY

BP OIL INC.

Midland Building Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO: 800-362-8059

FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA):

800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil

CAS REGISTRY NO.: Mixture

SYNONYMS: Internal combustion engine oil for engines burning heavy fuels

CHEMICAL FAMILY: Hydrocarbons FORMULA: Refined petroleum oil plus additives

COMPOSITION: Solvent refined paraffinic base oil and naphthenic coastal base oil blend plus methacrylate polymer viscosity index improver and calcium sulfonate, zinc dithiophosphate, succinimide combined inhibitor/detergent/dispersant package. The blended oil contains not

pore than 0.2% zinc, 0.2% phosphorus, 2.0% calcium.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m³ TLV (8 hour time weighted average exposure; OSHA 29 CFR

1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and ter. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 680°F

POUR PT.: 0°F

VAPOR PRESSURE: @ 100°F: Negligible

VAPOR DENSITY (Air=1): Heavier than air

SPECIFIC GRAVITY: @ 60°F: 0.915

SOLUBILITY IN WATER: Negligible

PERCENT VOLATILE: @ 100°F: 0%

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Dark clear and bright liquid with petroleum odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 430°F

AUTOIGNITION TEMP .: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDÍA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

MATERIAL SAFETY DATA SHEET - ENERGOL IC-HF 253, IC-HF 254 Page Two

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pres-

sure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide from combustion. Reactive volatile hydrocarbons from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 65.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level.

Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. e needed protective equipment and fire extinguisher available. Check operations for posstole ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

STCC NO.: 2911415

LABEL: None

IDENTIFICATION NO.:

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/6/81

REPLACING DATE OF: New Issue

PRODUCT CODES: P 3455, P 3456

REVIEWED BY: PJR/WDM/ECP/RAR/CWS/WJW/SMD

APPROVED:

TITLE: Product Safety Coordi

MATERIAL SAFETY DATA SEEET

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO)
BORON OIL COMPANY
BP OIL INC.
Midland Building
Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO: 800-362-8059 FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA): 800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil CAS REGISTRY NO.: Mixture

SYNONYMS: Slide & Way/Dripless Oils

CHEMICAL FAMILY: Hydrocarbons FORMULA: Refined petroleum oil plus additives COMPOSITION: Solvent refined paraffinic base oil blend plus an isobutylene polymer, a benzotriazole derivative, and sulfur-phosphorus anti-wear, antioxidant ashless additive package.

the blended oil contains not more than 0.8% sulfur.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m³ TLV (8 hour time weighted average exposure; OSHA 29 CFR

1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and ater. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of

endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 750°F or higher POUR PT.: -15° to 0°F

VAPOR PRESSURE: @ 100°F: less than 0.1 mm Hg VAPOR DENSITY (Air=1): Heavier than air

SPECIFIC GRAVITY: @ 60°F: 0.875 - 0.886 SOLUBILITY IN WATER: Negligible

PERCENT VOLATILE: @ 100°F: 0% EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Orange red to dark red liquid with "petroleum oil" odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 425°F - 440°F AUTOIGNITION TEMP.: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil.

Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

MATERIAL SAFETY DATA SHEET - ENERGOL HP-68-C, HP-100-C, HP-220-C Page Two

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pres-

sure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, traces of sulfur oxides from combustion. Reactive volatile hydrocarbons, traces of hydrogen sulfide from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may e put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 265.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level.

Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. we needed protective equipment and fire extinguisher available. Check operations for possible ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO.: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/20/81

REPLACING DATE OF: Undated OSHA-20

PRODUCT CODES: P 3313, P 3314, P 3315

/PJR/WIM/ECP/RAR/WJW/SMD REVIEWED BY:

APPROVED:

TITLE: Product Safety Cookdinator

MATERIAL SAPETY DATA SEZET

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO)

BORON OIL COMPANY

BP OIL INC.

Midland Building

Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO:

800-362-8059

FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA):

800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil

CAS REGISTRY NO .: Mixture

SYNONYMS: R and O Oil, Multi-purpose Lubricating and Hydraulic Oil

CHEMICAL FAMILY: Hydrocarbons

FORMULA: Refined petroleum oil plus additives COMPOSITION: Solvent refined paraffinic base oil blend plus additive package containing rust

inhibitor, antioxidant, antifoam, and methacrylate polymer pour depressant.

STATEMENT OF HEALTH HAZARD

ARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneu-

monitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m³ TLV (8 hour time weighted average exposure; OSHA 29 CFR 1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contat may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and water. If skin exposure was directly from high pressure jet get immediate medical attention as oil may be driven through skin. Otherwise use emollient cream if needed. Change all ntaminated clothing; shower at earliest convenience. Swallowing: DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 700°F or above

VAPOR PRESSURE: @ 100°F: less than 0.1 mm Hg

POUR PT.*: -25°/-25°/-25°/-20°/-5°/0°F VAPOR DENSITY (Air=1): Heavier than air

SPECIFIC GRAVITY: @ 60°F: 0.865 to 0.887

SOLUBILITY IN WATER: Negligible

PERCENT VOLATILE: @ 100°F: 0%

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Pale yellow to orange liquid with "petroleum oil" odor.

*Property listed in order by grade (22 thru 220).

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT*: (ASTM D-92) 380°/400°/410°/445°/ AUTOIGNITION TEMP.: Not known

490°/500°F

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA

29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

MATERIAL SAFETY DATA SHEET - ENERGOL HL 22, 32, 46, 68, 100, 220 Page Two

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pres-

sure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide from combustion. Reactive volatile hydrocarbons from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may be put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 65.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level.

Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. Have needed protective equipment and fire extinguisher available. Check operations for posble ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO.: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/17/81

REPLACING DATE OF: Undated OSHA-20

PRODUCT CODES: P 9353, P 3381, P 9346, P 9347,

P 3384, P 9348, P 9349, P 3417

REVIEWED BY: PJF WID BCP / RAR / CWS / WJW / SMD

APPROVED:

TITLE: Product Safety Coordinator

MATERIAL SAPETY DATA REFET

ORIGINA (Red)

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO) BORON OIL COMPANY

BP OIL INC.

Midland Building Cleveland, Ohio 44115 CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO:

800-362-8059

FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA):

800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil

CAS REGISTRY NO.: Mixture

SYNONYMS: Paper machine circulating oil

CHEMICAL FAMILY: Hydrocarbons FORMULA: Refined petroleum oil plus additives

COMPOSITION: Solvent refined paraffinic base oil blend plus alkyl zinc dithiophosphate antioxidant, corrosion inhibitor, and a lubricant preservative additive. The blended oil contains not more than 0.10% barium and 0.10% zinc.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/ri³ TLV (8 hour time weighted average exposure; OSHA 29 CFR

1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and ter. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO TT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPO-SURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of

endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 700°F

VAPOR PRESSURE: @ 100°F: Negligible

SPECIFIC GRAVITY: @ 60°F: 0.881 PERCENT VOLATILE: @ 100°F: 0%

VAPOR DENSITY (Air=1): Heavier than air

SOLUBILITY IN WATER: Negligible

POUR PT.: 5°F

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Light orange, clear and bright liquid with moderate petroleum odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 450°F

AUTOIGNITION TEMP.:

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pres-

sure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, traces of sulfur oxides from combustion. Reactive volatile hydrocarbons, traces of hydrogen sulfide from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may e put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 65.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level.

Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. we needed protective equipment and fire extinguisher available. Check operations for pos-

ole ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO.: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/20/81

REPLACING DATE OF: New Issue

PRODUCT CODES: P 3318

REVIEWED BY: PJR/WDM/ECP/RAR/WJW/SMD

APPROVED:

TITLE: Product Safety Coord nator

ORIGINA

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO)

BORON OIL COMPANY

BP OIL INC.

Midland Building

Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO:

800-362-8059

FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA):

800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil

SYNONYMS: Marine diesel engine oil

CAS REGISTRY NO .: Mixture

CHEMICAL FAMILY: Hydrocarbon

FORMULA: Refined petroleum oil plus additives COMPOSITION: Solvent refined paraffinic base oil blend plus alkyl zinc dithiophosphate, calcium sulfonate, and sulfurized alkyl calcium phenate with calcium carbonate and amine detergent/dispersant package. The blended oil contains not more than 0.1% zinc, 0.1% phosphorus, 0.4% calcium and 1.5% sulfated ash.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m³ TLV (8 hour time weighted average exposure; OSHA 29 CFR

1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and eter. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPO-SURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 700°F

VAPOR PRESSURE: @ 100°F: negligible

SPECIFIC GRAVITY: @ 60°F: 0.887

PERCENT VOLATILE: @ 100°F: 0%

POUR PT.: -5°F

VAPOR DENSITY (Air=1): Heavier than air

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Dark, clear and bright liquid with petroleum odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 480°F

AUTOIGNITION TEMP .: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog. SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pressure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide from combustion. Reactive volatile hydrocarbons from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may be put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 265.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level. Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. Have needed protective equipment and fire extinguisher available. Check operations for posible ignition sources.

SAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO.: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA §311(b)(3)).

REVISION DATE: 11/20/81

REPLACING DATE OF: New Issue

PRODUCT CODES: P 3248

REVIEWED BY: /PJFXWDM/EGP/RAR/WJW/SMD APPROVED:

TITLE: Product Safety Coordinator

(Rea)

MARKETED BY:

THE STANDARD OIL COMPANY BORON OIL COMPANY BP OIL INC. Midland Building

Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO: 800-362-8059

ELDORAN 4

FROM OUTSIDE OHIO: 800-321-8642 800-424-9300 CHEMTREC (CMA):

DESCRIPTION

CAS REGISTRY NO .: Mixture CHEMICAL NAME: Petroleum Oil

SYNONYMS: Parting compound, mold release compound

FORMULA: Refined petroleum oil plus additives CHEMICAL FAMILY: Hydrocarbon

COMPOSITION: Hydrogen-treated naphthenic coastal base oil plus 20% Mineral Spirits and 2.5%

Oleic Acid.

STATEMENT OF HEALTH HAZARD

RD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m^3 TLV (8-hour time-weighted average exposure; OSHA 29 CFR

1910.1000 Table Z-1). Avoid unnecessary exposure to mist or liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and water. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING DIL INTO LUNGS. After spontaneous voming, monitor for breathing difficulty. IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of

endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

POUR PT.: -20°F BOILING PT.: (Initial) 570°F

VAPOR PRESSURE: @ 68°F: 2 mm Hg SPECIFIC GRAVITY: @ 60°F: 0.882

PERCENT VOLATILE: @ 100°F: 0%

VAPOR DENSITY (Air=1): Heavier than air

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Clear light colored liquid with hydrocarbon odor.

FIRE AND EXPLOSION HAZARD DATA

AUTOIGNITION TEMP .: Not known FLASH POINT: (ASTM D-92) 175°F

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil.

Use water to cool threatened containers. Product is a Class IIIA Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pressure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide from combustion. Reactive volatile hydrocarbons from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may be put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem. Where oil is applied to mold as a fog spray use of respi-

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level. Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. Have needed protective equipment and fire extinguisher available. Check operations for posle ignition sources.

DISSOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

IDENTIFICATION NO.: None

STCC NO.: 2911415

OTHER REGULATORY REQUIREMENTS Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/20/81

REPLACING DATE OF: New Issue

PRODUCT CODES: P 3279

REVIEWED BY: PJF/WDM/ECP/RAR/WJW/SMD

APPROVED:

TITLE: Product Safety Coordinator

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO) BORON OIL COMPANY

BP OIL INC.

Midland Building

Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO:

800-362-8059 800-321-8642

FROM OUTSIDE OHIO: CHEMTREC (CMA):

800-424-9300

DESCRIPTION

CHEMICAL NAME: Petroleum Oil

CAS REGISTRY NO.: Mixture

SYNONYMS: Cylinder oil for marine engines burning heavy fuel

CHEMICAL FAMILY: Hydrocarbons

FORMULA: Refined petroleum oil plus additives 1 COMPOSITION: Solvent refined paraffinic base oil and naphthenic coastal base oil blend plus calcium phenate, calcium sulfonate, and succinimide ashless dispersant. The blended oil

contains not more than 3.0% calcium.

STATEMENT OF HEALTH HAZARD

ARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oil mist: 5 mg/m³ TLV (8 hour time weighted average exposure; OSHA 29 CFR

1910.1000 Table Z-1). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Allergic reaction may occur with a few individuals. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and water. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO T INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomrting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPO-SURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial) 700°F

POUR PT.: +5°F

VAPOR PRESSURE: @ 100°F: less than 0.1 mm Hg

VAPOR DENSITY (Air=1): Heavier than air

SPECIFIC GRAVITY: @ 60°F: 0.940

SOLUBILITY IN WATER: Negligible

PERCENT VOLATILE: @ 100°F: 0%

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Pale yellow to dark orange liquid with "petroleum oil" odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 450°F AUTOIGNITION TEMP .: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protec-

tion. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA

29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 CFR 1910.156).

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pres-

sure, strong oxidizing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide from combustion. Reactive volatile hydrocarbons from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may e put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 65.314).

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level.

Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. eve needed protective equipment and fire extinguisher available. Check operations for posble ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oilsoaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415 IDENTIFICATION NO.: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 11/6/81

REPLACING DATE OF: Undated OSHA-20

PRODUCT CODES: P 3242

REVIEWED BY: PJF/WDM/ECP/RAR/CWS/WJW/SMD

APPROVED: TITLE: Product Safety Coordinator

ÜRIGINAL (Red)

MARKETED BY:

THE STANDARD OIL COMPANY (OHIO) BORON OIL COMPANY BP OIL INC.

Midland Building Cleveland, Ohio 44115 CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO: 800-362-8059

FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA) 800-424-9300

DESCRIPTION

CHEMICAL NAME: Non-Leaded Extreme Pressure Gear Lubricant

CAS REGISTRY NO.: Mixture

SYNONYMS: Gear lubricant

CHEMICAL FAMILY: Petroleum Hydrocarbons

FORMULA: Refined petroleum oil plus additives

COMPOSITION: Solvent refined paraffinic base oil blend plus a sulfur-phosphorus multi-purpose additive, a polylsobutylene viscosity index improver and a methacrylate copolymer pour depressant. The blended oil contains not more than 3.0% sulfur and 0.2% phosphorus.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: Oli mist: 5 mg/M³ PEL (8-hour time-weighted average exposure; OSHA 29 CFR 1910.1000, Table Z-I). Avoid unnecessary exposure to liquid oit.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be delayed.

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and water. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial Range) 680°-780°F

VAPOR PRESSURE: @ 100°F: less than 0.1 mm Hg

SPECIFIC GRAVITY: 6 60°F: 0.8789 - 0.8899

PERCENT VOLATILE: @ 100°F: 0\$

POUR PT .: above 0°F

VAPOR DENSITY (Air=i): Heavier than air

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Dark green liquid with "petroleum oil" odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 410°F or above

AUTOIGNITION TEMP .: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chamicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B fires (OSHA 29 OFR 1910.156).

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chlorine, oxygen under pressure, strong oxidizers) ing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and trace sulfur dioxide from combustion. Reactive volatile hydrocarbons and trace hydrogen sulfide from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of Ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, inclnerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking soilds may be put in approved landfill. Deposit of liquid in landfill is strictly regulated.

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where misting is a problem.

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level. Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Berrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. Have needed protective equipment and fire extinguisher available. Check operations for possible ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oil-soaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO .: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 8/21/84

REPLACING DATE OF: 10/77 OSHA-20

PRODUCT CODES: P 3368

APPROVED;

TITLE: Product Serety Coordinator

REVIEWED BY: - XEB/HNF/KLG/GRK/RWM/RLP/RAR/OWS

ALTERNATIVE TO OSHA-20 FORM

0555D

ORIGINAL (Red)

MARKETED BY:

1

THE STANDARD OIL COMPANY (OHIO) BORON OIL COMPANY BP OIL INC. Midland Building

Cleveland, Ohio 44115

CORPORATE EMERGENCY TELEPHONE (Toll-Free)

FROM WITHIN OHIO:

800-362-8059

FROM OUTSIDE OHIO: 800-321-8642

CHEMTREC (CMA)

800-424-9300

DESCRIPTION

CHEMICAL NAME: Non-Leaded Extreme Pressure Gear Lubricant

CAS REGISTRY NO .: Mixture

SYNONYMS: Gear lubricant

CHEMICAL FAMILY: Petroleum Hydrocerbons

FORMULA: Refined petroleum off plus additives

COMPOSITION: Solvent refined paraffinic base oil blend plus a sulfur-phosphorus multi-purpose additive, a polylsobutylene viscosity index improver and a methacrylate copolymer pour depressant. The blended oil con-

tains not more than 3.0% sulfur and 0.2% phosphorus.

STATEMENT OF HEALTH HAZARD

HAZARD DESCRIPTION: No acute effects from incidental contact with new oil. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contacts. Danger of serious pneumonitis from aspiration into lungs

EXPOSURE LIMITS: Oil mist: 5 mg/M³ PEL (8-hour time-weighted average exposure; OSHA 29 CFR 1910.1000, Table Z-I). Avoid unnecessary exposure to liquid oil.

EMERGENCY TREATMENT

EFFECTS OF OVEREXPOSURE: Excessive prolonged or repeated contact may dry skin, cause irritation, dermatitis, lesions. Swallowing liquid oil may cause discomfort but no lasting effects. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing. This effect may be de-

EMERGENCY AID: Eyes: wash with copious water for 15 minutes. Eyelids should be held apart and away from eyeball to ensure thorough rinsing. Skin: wash thoroughly with soap and water. Change all contaminated clothing; shower at earliest convenience. Swallowing: DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING OIL INTO LUNGS. After spontaneous vomiting, monitor for breathing difficulty. Refer to physician. IF SYMPTOMS PERSIST OR EXPOSURE IS SEVERE, SEEK PROMPT MEDICAL HELP.

NOTE TO PHYSICIAN: Petroleum aspiration may cause severe pneumonitis ('oil pneumonia'). Vomiting should not be induced, and gastric lavage should be undertaken with consideration of endotracheal intubation, especially with an unconscious patient.

PHYSICAL DATA

BOILING PT.: (Initial Range) 680°-780°F

POUR PT.: above -5°F

VAPOR PRESSURE: @ 100°F: less than 0.1 mm Hg

VAPOR DENSITY (Air=1): Heavier than air

SPECIFIC GRAVITY: @ 60°F: 0.8762 - 0.8871 PERCENT VOLATILE: @ 100°F: 0\$

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE (Water=1): Very slow

APPEARANCE AND ODOR: Dark green liquid with "petroleum oil" odor.

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (ASTM D-92) 400°F or above

AUTOIGNITION TEMP .: Not known

FLAMMABLE LIMITS IN AIR: Not known

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemicals, sand or earth, water fog.

SPECIAL FIRE-FIGHTING PROCEDURES: Avoid breathing fumes, wear adequate respiratory protection. Do not spray water directly into fire to avoid foaming or spread of floating oil. Use water to cool threatened containers. Product is a Class IIIB Combustible Liquid (OSHA 29 CFR 1910.106). Fires involving product are Class B

CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (peroxides, chiorine, oxygen under pressure, strong oxidizers) ing acids), extreme heat or sources of ignition.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and trace sulfur dioxide from combustion. Reactive votatile hydrocarbons and trace hydrogen suifide from thermal decomposition.

SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN: Eliminate all sources of ignition. Contain spill. Recover liquid by mopping, vacuum, or absorbent. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots, or other protective clothing as needed.

WASTE DISPOSAL: Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may be put in approved landfill. Deposit of liquid in landfill is strictly regulated.

SPECIAL PROTECTION AND PROCEDURES

RESPIRATORY PROTECTION: Not needed in normal use. A cartridge respirator for oil mist may be used where mist-

VENTILATION: Local or mechanical ventilation sufficient to control mist below TLV level. Check for possible ignition sources.

PROTECTIVE EQUIPMENT: Not needed in normal use. Barrier creams, oil-impervious gloves and sleeves or other protective gear, including eye shield, may be used to reduce chances of contact.

SPECIAL PRECAUTIONS

HANDLING AND STORING: Avoid extremes of temperature in storage. Store away from sources of ignition. Avoid contamination. Do not store in unlabeled containers.

WORKPLACE: Practice good housekeeping. Clean up spills promptly to avoid slippery footing. Have needed protective equipment and fire extinguisher available. Check operations for possible ignition sources.

DISPOSAL: Used oil must be disposed of in an environmentally acceptable manner. See WASTE DISPOSAL. Do not

put oil into sewer system or use as road oil or for other use which may result in uncontrolled release.

PERSONAL: Good personal hygiene is most important. Keep clean. Do not continue to wear oil-soaked leather goods. Wash before eating. Use emollient cream to counter dry skin if needed.

LABELING AND SHIPPING

HAZARD CLASS: None

PROPER SHIPPING NAME: Lubricating Oil (Motor); Petroleum Lubricating Oil (Rail)

PLACARD: None

LABEL: None

STCC NO.: 2911415

IDENTIFICATION NO .: None

OTHER REGULATORY REQUIREMENTS

Any environmental release which introduces oil into public waterways (sufficient to produce an oil sheen) must be reported promptly to the National Response Center, U.S. Coast Guard, Washington, D.C. (1-800-424-8802) (FWPCA \$311(b)(3)).

REVISION DATE: 8/21/84

REPLACING DATE OF: 10/77 OSHA-20

PRODUCT CODES: P 3367

REVIEWED BY: KEB/HNF/KLG/GRK/RWM/RLP/RAR/OWS

TITLE: Product Safety Coordinator

ALTERNATIVE TO OSHA-20 FORM

0556D

ORIGINAL "

MATERIAL SAFETY DATA SHEET

PAGE 1

			L				
	Sun Refining and Marketing Company		PĒRĪ COMP	LIANCE WITH H	SSIST OUR CUS FALTH/SAFFIY	ON IS PROVIDED STOMERS IN ASSESSI PENVIRONMENTAL HIS TO YOUR MANAGE	
PRINTED:	85/12/07		IUF S	AFETY AND HEAD TED FOR YOU FO	LTHA THIS IS	THE FIRST FORM	1 i
SECTION 1	IDENTIFICATION		FRIN	LEW FIR YOU FI	W 1412 PKIMI		R000001389
NAME SUNQU	ENCH 1021	SYNONYMS	CHING OIL				EV. DATE
CAS REGISTRY NO	о с	AS NAME					11/12/85
		- 40-CLAS	SIFICATION-MIXT	- · -			
Γ			–	CHEMICAL FAMILY	FMD		1
	UNIVERSAL CONTAI STEEL DRUM CORPJ 2ND & PRICE STRE TRAINER	RATION	•	SUN REFINING	MARKETING CO Ter 1801 mari	IMPANY KET STREET	
ا م	_			INFORMATION SUPPLIES			
SECTION 2	INGREDIENTS				12151 293-	-6321	3 Marie 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	EFINED LIGHT PAR -95-3. SOME BLEN SITY OF THE FINI PHYSICAL DATA	AFFINIC DISTI	LLATE. CAS#6474 ONTAIN SOLVENT RANGES FROM B5	1-89-5; AND SC REFINED HEAVY TO 95 SUS @ 10	OLVENT DEWAXE PARAFFINIC (ODF.	ED RESIDUAL OIL. DISTILLATE. CAS#64	
	THISICAL DATA	· · · · · · · · · · · · · · · · · · ·		·		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	REPORT OF BUILDING
	60 mm Hg MIDE RANG			(AIR = 1)	(0-008	pH INFORMATION:pH_H/A	.@g/1 H
MELTING POINT:	_N/A	° ^{F,} \/A	SOLUBILITY IN H	,O: (% BY VOL.)	11	PARTITION COEFFICIENT:_M_)
SPECIFIC GRAVITY			% VOLATILES BY		ц	APPEARANCE AMBER FLE	
PACKING DENSITY (WHEN APPLICAE	V a / m 3		(ETHYL ETHER :		SLOWER	AND ODOR: LITTLE OF ODOR THRESHOLD (ppm) N)DR
SECTION 4		TA (CONT ON BACE 2)					
. 02011011	THE AND EXPENSION OF	TA TONT. ON PAGE 21			<u></u>	WW.	一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个
FLASH POINT:	345 MINIMUM COC		°C. AUTOIGNITIO	TEMPERATURE: 650	D ESTIMATED	- F. 343.3 ESTIMATE	<u>-D</u> •c.
	NFPA CLASSIFICATIO)N	HAZARD RATING	3	FLAM	MABLE LIMITS IN AIR	
HEALTHO	FIRE REA	CTIVITY _3_	LEAST SLIG		-	OT DETERMINED	% \
SPECIFIC HAZARD		····	MODERATE HIGH E	TREME		OT DETERMINED	% \
FIRE AND	EXPLOSION HAZARDS		<u> </u>				
	DE TO BURN (FLAS	H POINT GREAT	ER THAN 200F).	· · · · · · · · · · · · · · · · · · ·		Rí	SUN CODE

MATERIAL SAFETY DATA SHEET PAGE 2 SUN CODE EXTINGUISHING MEDIA , 0000013890 SPECIAL FIRE FIGHTING INSTRUCTIONS AATER FOG. CHEMICAL FOAM. DRY CHEMICAL POWDER. WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIRE FIGHTING IN CONFINED SPACE. SECTION 5 HEALTH HAZARD INFORMATION **EXPOSURE LIMITS** BHR. TIME WEIGHTED PERMISSIBLE EXPOSURE 5.0 MG/M3 . GOVERNMENT REGULATION. ROUTES OF EXPOSURE AND EFFECTS INHALATION NO EFFECTS EXPECTED. SKIN PRACTICALLY YON-TOXIC IF ABSORBED (LD50 GREATER THAN 2000 MG/KG). MILD IRRITATION WITH PROLONGED OR REPEATED CONTACT. EVE CONTACT WITH THE EYE MAY CAUSE TEMPORARY SMARTING. NO PERMANENT DAMAGE EXPECTED. INGESTION HARMFUL OR FATAL IF SWALLOWED. PULMONARY ASPIRATION HAZARO IF SWALLOWED AND VOMITING OCCURS. FIRST AID INHALATION NONE NORMALLY REQUIRED. SKIN WASH WITH SOAP AND WATER UNTIL NO ODOR REMAINS.

.

SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3) STABILITY INCOMPATIBLE MATERIALS HAZARDOUS DECOMPOSITION PRODUCTS STABLE. STRONG OXIDIZERS. CARBON MONOXIDE AND ASPHYXIANTS

INGESTION DO NOT INDUCE VOMITING! DO NOT SIVE LIQUIDS! OBTAIN MEDICAL ASSISTANCE. SMALL AMOUNTS WHICH

EVE FLUSH WITH WATER. IF IRRITATION PERSISTS. OBTAIN MEDICAL ASSISTANCE.

ACCIDENTALLY ENTER MOUTH SHOULD BE RINSED OUT UNTIL TASTE OF IT IS GONE.

O ADDITIONAL PRECAUTIONS AND LABELS



Sun Refining and Marketing Company

MATERIAL SAFETY DATA SHEET

THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM

SUN CODE

PRINTED: 85/12/07 SECTION 1 IDENTIFICATION	PRINTED FO	R YOU FOR THIS PRODUCT	X 00000 3 7 1 5 U
NAME SUNFIFET DEXRON II			REV. DATE 12/02/85
CAS NAME	IFICATION - MIXTURE		
UNIVERSAL CONTAINER STEEL DRUM CORPORATION	CHEMICA SUN R	EFINING COMPANY	
ZND & PRICE STREET TRAINER PA 19013	PHILI	PENN CENTER 1801 MARKET STREET LOELPHIA PA 19103 ATION SUPPLIED BY HONE RAMONA PANSON L2151 293-6323	
SECTION 2 INGREDIENTS MATERIAL(S) SEVERELY SOLVENT REFINED LIGHT PARAFFIN PARAFFINIC DISTILLATE CAS# 64741-88-4; DISTILLATE (PETROLEUM) CAS# 64742-52-5. DAZIX SULFUR: 0-034% PHOSPHORUS.	CHEMICALLY NEUTRALIC CREANIC-METALLO C	64741-89-5; SEVERELY SOLVENT R ZED, SEVERELY HYDROTREATED. HE JMPOUNDS; RED DYE. PRODUCT TYP	REFINED HEAVY AVY NAPHTHENIC PICALLY CONTAINS
BOILING POINT: 760 mm Hg HIGH °F. 4134 MELTING POINT: M/A °F. 4/A	VAPOR PRESSURE: {mm VAPOR DENSITY: (//	AIR = 1) <u>13.4</u> Octanol/Wati	N:pH_6_4_@g/I H:
SPECIFIC GRAVITY: (H,O=1) 0-88 PACKING DENSITY: Kg/m³ N/A	% VOLATILES BY VOL.: EVAPORATION RATE: (ETHYL ETHER = 1)	APPEARANCE AND ODOR:	LED FLUID.
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)			
FLASH POINT: 350 MINIMUM COC . F.177 MINIMUM	CAC AUTOIGNITION TEMPER	ATURE: 695 ESTIMATED	STIMATED°C.
NFPA CLASSIFICATION	HAZARD RATING	FLAMMABLE LIMITS	IN AIR
HEALTH D FIRE 1 REACTIVITY 3	LEAST SLIGHT 0 1 MODERATE HIGH EXTREME	LOWER EXPLOSIVE LEVEL (LEL) MOT DETER	
SPECIFIC HAZARD	2 3 4	UPPER EXPLOSIVE LEVEL (UEL) NOT DETER	MINED % VI
FIRE AND EXPLOSION HAZARDS			CUN CODE
SAN BE HADE TO BURN (FLASH POINT GREATE	R THAN 200F1.	•	ROD 000371401

. 2	MATERIAL SAFET	Y DATÁ SHEET		PAGE 2		SUN CODE
三 🥞 🔊 💆						
EXTINGUISHING				RE FIGHTING INSTRUCTIONS		**************************************
ARBON DIOXI	HEMICAL FOAM. DRY CHEP	MICAL POWDER.	WEAR SELF	-CONTAINED BREATH! IN CONFINED SPACE	ING APPARATUS	WHEN FIRE
1.			PIGHTING	IN CONFINED SPACE	•	
i						
SECTION 5 HE	ALTH HAZARD INFORMATION		·			
HR. TIME WE	IGHTED PERMISSIBLE EXP	OSURE 5-0 MC/M3	- CIM DECTMMENT	DATE ON		
	POSURE AND EFFECTS		- JUN KESSAMENI	JATION.		
HALATION NO ACI	UTE EFFECTS EXPECTED 1	O THICE EXPOSIBL	CITMTT			
		D THICE EN GOOK	r ciuii.			
i		•				•
KINPRACTICALI	LY NON-TOXIC IF ABSORE	ED TIDED COEATE	THAN 2000 MC/	VPB MTNTULL COST		
EPEATED CONT	TACT.	CO LEDDO BREMIEI	N INAM ZUUU MG/I	COTO MINIMAL IRRIT	ATION WITH P	ROLONGED OR
,						
		•				
E CONTACT W	ITH THE EYE MAY CAUSE	MINIMAL IRRITAT	IDN.			
				•		
CECTION DOACT						
AT BOD	ICALLY NON-TOXIC (LD50	> 15G/KG1. EST	MATED LOSO IN F	KATS IS: >15	GRAMS PER KI	LOGRAS DE
FIRST AID			· · · · · · · · · · · · · · · · · · ·			<u> </u>
HALATION MOVE	PERSON TO FRESH AIR.					
IN WASH WITH	H SDAP AND HATER UNTIL	MO ODOD DEMATES	C MACH CLOSIA		·	
	TOTAL MATER DATE	. NO BOOK KEMAINS	D. MAZH CEDIHEM	> REFORE REUSE.		
•						
E FLUSH WITH	WATER. IF IRRITATION	PERSISTS. DBTA	IN MEDICAL ASSIS	STANCE		
			ALDIONE ASSI	TARCES		•
MUINTS PHICE	IQUIDS AND INDUCE VOMI	TING UNLESS VICT	IM IS UNCONSCIO	JUS- OBTAIN MEDICA	L ASSISTANCE.	SMALL
HILL	ACCIDENTALLY ENTER	MOIN SHOOFD BE E	IINSED OUT UNTIL	. TASTE OF IT IS E	ONE.	JUNEE
SECTION 6 REA	ACTIVITY DATA (CONT. ON PAGE 3)					
TABLE.	STABILITY	INCOM	PATIBLE MATERIALS	HAZAI	RDOUS DECOMPOSITIO	N PRODUCTS
MOFE	•	STRONG OXIDIZE	RS	CARBON MON	IDXIDE AND ASP	PHYXIANTS.
L 1966 1						
	· · · · · · · · · · · · · · · · · · ·	;	•			
			: :	<u>.</u>		
		,	* \$			
			. •	₩. 4.		
And the second s			•	<u>√</u> .		
		**	<i>i</i>		`*	
1. 1176 (000)			:	<i>:</i>		1967年 - 日本

••::::

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

10 ADDITIONAL PRECAUTIONS AND LABELS

-9 ORIGINAL (Red)

MATERIAL SAFETY DATA SHEET

Sun Refining and Marketing Company		THIS PRODUCT SA PERIODICALLY TO		ERS IN ASSESSING
, , , , , , , , , , , , , , , , , , , ,		REGULATIONS. PL	HEALTH/SAFETY/ENV EASE FORWARD THIS	TO YOUR MANAGER SUN CODE
PRINTED: 85/12/07 SECTION 1 IDENTIFICATION		OF SAFETY AND H	EALTH. THIS IS THE	FIRST FORM RODDOGS1626
AME SUNFLEET ATE TYPE F	SYNONYMS			REV. DATE
S REGISTRY NO CAS N	AME TIASSIFICATIO	N _ MIVINGE		
UNIVERSAL CONTAINER STEEL DRUM CORPORAT 2ND & PRICE STREET TRAINER SECTION 2 INGREDIENTS ATERIAL(S) EVERELY SOLVENT REFINED HEA CID DERIVATIVES; DITHIOPHOS ULFUR 0.16%, ZINC 0.05% AND SECTION 3 PHYSICAL DATA	PA 19013 PA 19013 VY PARAFFINIC DISTI	CHEMICAL FAMILY SUN REFINI TEN PENN C PHILADELPH INFORMATION SUF AND PHONE	BLEYD. NG NO MARKETING COMPA ENTER 1801 MARKET IA PA 1910 PULLED BY RAMONA PANSON (2151 293-632	STREET
PECIFIC GRAVITY: (H ₂ O=1) ORT ACKING DENSITY: Kg/m ³ N/A	NIDE RANGE °C VAPO N/A °C SOLU % VC EVAP (ETH	OR DENSITY: (AIR = 1) UBILITY IN H,O: (% BY VOL.) DLATILES BY VOL.: ORATION RATE:	OCT PAR	ANOLWATER STITION COEFFICIENT: CARANCE RED FLUID ODOR: CHARACIERISTIC DDDR R THRESHOLD (ppm) N.D.
SECTION 4 FIRE AND EXPLOSION DATA	CONT. ON PAGE 2)			
ASH POINT: 350 COC MINIMUM .F.	77 MINIMUM COC	AUTOIGNITION TEMPERATURE:	675 ESTIMATED of	357 ESTIMATED °C.

NFPA CLASSIFICATION HAZARD RATING FLAMMABLE LIMITS IN AIR LEAST SLIGHT

EALTH _0. FIRE _____ REACTIVITY 1 LOWER EXPLOSIVE LEVEL (LEL) _____ MOT DETERMINED MODERATE HIGH **EXTREME** PECIFIC HAZARD UPPER EXPLOSIVE LEVEL (UEL) NOT DETERMINED

2

· (4)

FIRE AND EXPLOSION HAZARDS

AN BE MADE TO BURN (FLASH POINT GREATER THAN 200F).

SUN CODE R0000D481424

% VOL

% VOL

SUN CODE

EXTINGUISHING MEDIA		SPECIAL FIRE FIGHTING	INSTRUCTIONS	×0000048142
ATER FOG. CHEMICAL FOAM. DR ARBON DIOXIDE.	Y CHEMICAL POWDER.	WEAR SELF-CONTAIN FIGHTING IN CONFI	ED BREATHING APPARATUMED SPACE.	JS WHEN FIRE
SECTION 5 HEALTH HAZARD INFORMATIO	N			
HR. TIME WEIGHTED PERMISSIB	LE EXPOSURE 5.0 MG/H3 .	SUN RECOMMENDATION.	•	
ROUTES OF EXPOSURE AND EFFECTS				
HALATION NO ACUTE EFFECTS EXPE	CTED TO TWICE EXPOSURE	LIMIT.		
•				
•		·		
IN PRACTICALLY NON-TOXIC IF	ABSORBED (LD50 GREATER	THAN 2000 MG/KG). HIL	D IRRITATION WITH PRO	DLONGED OR
EFEATED CONTACT.				
÷				
F CONTACT LITTLE THE PAR HAN	64:105 461 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
E CONTACT WITH THE EYE HAY	LAUSE MILD IRRITATION.			
GESTION PRACTICALLY NON-FOXIC	(L050 > 15G/KG).			
			•	
		•		
FIRST AID HALATION MOVE PERSON TO FRESH	ATD			
		<u> </u>		
IN WASH WITH SDAP AND NATER	UNTIL NO ODOR REMAINS.	WASH CLOTHING BEFORE	REUSE.	
	•			
F FLUSH WITH WATER. IF IRRI	TATION DESCRIPTION	MEDYCAL ACCYCYANGE		
	THIE DATE OF THE STATE OF THE S	HEDITAL MOSISIANTE.		
GESTION GIVE LIQUIDS AND INDUCTION OF THE PROPERTY OF THE PROP	E VOMITING UNLESS VICTI	M IS UNCONSCIOUS. DBT	AIN MEDICAL ASSISTANC	F. SMALL
MOUNTS WHICH ACCIDENTALLY E	NIER MOUTH SHOULD BE RI	INSED OUT UNTIL TASTE	OF IT IS GOVE.	
SECTION 6 REACTIVITY DATA (CONT. ON PAGE	GE 3)	·		
STABILITY STABILITY	INCOMP	PATIBLE MATERIALS	HAZARDOUS DECOMPOSI	ITION PRODUCTS
INDLE	STRONG OXIDIZER	IS.	CARBON MONOXIDE AND A	ASPHYXIANTS
				- · · ·
a. u. svá	·			
Table 1				
	. 77.7 ₁			

R00000481424

7.77		VM	CDIT	ATIO	J.
12.7	r. U	-10			•

ORIGINAL (Red)

OLYMERIZATION WILL NOT DCCUR.

SECTION 7 PROTECTION INFORMATION

VENTILATION

ENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT.

PERSONAL PROTECTIVE EQUIPMENT

YE SPLASH PROOF CHEMICAL GOGGLES RECOMMENDED TO PROTECT AGAINST SPLASH OF PRODUCT.

LOVES IMPERVIOUS SLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED.

 $\cdots \sim$

ESPIRATOR CONCENTRATION-IN-AIR DEFERMINES PROTECTION NEEDED. JSE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION. ESPIRATORY PROTECTION USUALLY NOT NEEDED UNLESS PRODUCT IS HEATED OR MISTED.

OTHER IF CONTACT IS UNAVOIDABLE. WEAR IMPERVIOUS PROTECTIVE GEAR. LAUNDER SOILED CLOTHES.

SECTION 8 DISPOSAL PROCEDURES

AQUATIC TOXICITY

IOT DETERMINED

SPILL, LEAK OR RELEASE

ONTAIN SPILL. ABSORB ON INERT MATERIAL.

WASTE DISPOSAL

OLLOW FEDERAL. STATE AND LOCAL REGULATIONS. DO NOT FLUSH TO DRAIM/ STORM SEWER. CONTRACT TO AUTHORIZED ISPOSAL SERVICE.

SECTION 9 SPECIAL PRECAUTIONS

STORAGE AND HANDLING CONDITIONS

IFPA CLASS IIIB STORAGE. AVOID PROLONGED BREATHING OF MIST OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

40 ADDITIONAL PRECAUTIONS AND LABELS

MATERIAL SAFETY DATA SHEET

 $\cdot \cdot (\cdot) \cdot \cdot$



Sun Refining and Marketing Company

HIS PRODUCT SAFETY INFORMATION IS PROVIDED	
UIS LEGITION IN TO LOCAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TO THE TOTAL	
ERTODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING	
Charles With Mark Tu Conferty (CNVTDDUMENTAL	
OMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL	
EGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER	JN CODE
EPACHITANSO SEENSE LAKMAKA LUIS LA LAGA HWAMACA	
OF SAFETY AND HEALTH. THIS IS THE FIRST FORM	
PRINTED FOR YOU FOR THIS PRODUCT ROODOO	371200

PRINTED: 85/12/07 SECTION 1 IDENTIFICATION		PRINTED FO	YOU FOR THIS PROD	UCT	R00000371200
	YNONYMS				REV. DATE
S REGISTRY NO. CAS NAM	NO CLASSIFICATIO	M _ MTYTHDE			
UNIVERSAL CONTAINER STEEL DRUM CORPORATI 2ND & PRICE STREET TRAINER SECTION 2 INGREDIENTS ATERIAL(S) EFINED PARAFFINIC DILS PLUS	DN PA 19013	TEN P PHILA INFORMA AND PHO	BLENDED PETROL EFINING AND MARKETING C ENN CENTER 1801 MAR DELPHIA PA THON SUPPLIED BY ONE RAMONA PA (2)53 293	OMPANY KET STREET 19103	
	VAP	OR PRESSURE: (mm H	- AT 200C) ALT	pH_INFORMATION:pHN_/	A @ g/I H ₂ O
OILING POINT: 760 mm Hg HIGH HITH °F.		OR DENSITY: (AI	g AT 20°C) NIL		4 , 1120
ELTING POINT: N/A °F.	°c sou	UBILITY IN H,O: (% BY)	OL.) NTL	OCTANOL/WATER PARTITION COEFFICIENT:_	N-D-
PECIFIC GRAVITY: (H ₂ 0=1) 0.88	% V	OLATILES BY VOL.:	NIL	APPEARANCE LIGHT	
ACKING DENSITY: Kg/m³ N/A		PORATION RATE: HYL ETHER = 1)	LOODX SLOWER	AND ODOR: LITILE ODOR THRESHOLD (ppm)	
SECTION 4 FIRE AND EXPLOSION DATA (CO	NT. ON PAGE 2)				
ASH POINT: 425 MINIMUM CDC .F.21	B MINIMUM COC .c.	AUTOIGNITION TEMPERA	TURE: 700 ESTIMATED	of 371 ESTIMAT	<u>ED</u> •c.
NFPA CLASSIFICATION	HAZ	ARD RATING	FLA	MMABLE LIMITS IN AIR	
EALTHO FIREI REACTIVITY	LEAST 0	1	LOWER EXPLOSIVE LEVEL (LEL)	NOT DETERMINED	% VOL
PECIFIC HAZARD	MODERATE 2	HIGH EXTREME 3 4	UPPER EXPLOSIVE LEVEL (UEL)	NOT DETERMINED	% VOL
SAFIRE AND EXPLOSION HAZARDS					
AN BE MADE TO BURN (FLASH PO	INT GREATER THAN F	200F1.			SUN CODE R00000371200

RIGI (Reg		_000003712
EXTINGUISHING MEDIA		SPECIAL FIRE FIGHTING INSTRUCTIONS
ATER FOG. CHEMICAL FOAM. DRY CHEMI ARBON DIOXIDE.	CAL POWDER.	WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIRE FIGHTING IN CONFINED SPACE.
SECTION 5 HEALTH HAZARD INFORMATION		
HR. TIME WEIGHTED PERMISSIBLE EXPO	CHOE E D MC/M3	CHAI DEFOUNDATION
HK. TIME METPHIED LEKHT22TREE EXEC	120KE 3*0 M6/43	• 204 KECO-MEMORITOM•
ROUTES OF EXPOSURE AND EFFECTS		
HALATION NO ACUTE EFFECTS EXPECTED TO) INICE EXPOSURE	CIMII.
KINPRACTICALLY NON-TOXIC IF ABSORBE	ED (LD50 GREATER	THAN 2000 MG/KG). NO SKIN EFFECTS EXPECTED.
YE CONTACT WITH THE EYE MAY CAUSE TO SESTION PRACTICALLY NON-FOXIC (LD50 EIGHT.		
FIRST AID		
WHALATION NONE NORMALLY REQUIRED.		
KIN WASH WITH SOAP AND JATER UNTIL	NO DOUR REMAINS	•
YE FLUSH WITH WATER.		
NGESTION GIVE LIQUIDS AND INDUCE VOMI	TING UNLESS VICT	TIM IS UNIDUSCIOUS. OBTAIN MEDICAL ASSISTANCE.
SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)		
STABILITY		MPATIBLE MATERIALS HAZARDOUS DECOMPOSITION PRODUCTS
TABLE.	STRUNG DXIDIZE	ERS. CARBON MONDKIDE AND ASPHYXIANTS
1		<u> </u>

• • • •

PAGE 1

Š		

CAS REGISTRY NO

MATERIAL(S)

MELTING POINT:

SPECIFIC GRAVITY:

PACKING DENSITY:

SECTION 4

FLASH POINT:

SPECIFIC HAZARD

HEALTH

(WHEN APPLICABLE)

Ω

PRINTED: 85/12/07
SECTION 1 IDENTIFICATION

SUNPAR LH 107

SECTION 2 INGREDIENTS

64741-19-5

TRAINER

INISHED DIL OF APPROXIMATELY

 $(H_2O = 1)$

Kg/m³

FIRE ___

Sun Refining and Marketing Company

UNIVERSAL CONTAINER

2ND & PRICE STREET

STEEL DRUM CORPORATION

BOILING POINT: 760 mm Hg HIDE RANGE OF HIDE RANGE OC

0.85

NFPA CLASSIFICATION

FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)

340 MINIMUM COC OFITE MINIMUM COC

MATERIAL SAFETY DATA SHEET

SYNONYMS

PA 19013

CAS NAME

SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL SUN CODE FORWARD THIS TO YOUR MANAGER SAFETY AND HEALTH. THIS IS THE FIRST FORM PRINTED FOR YOU FOR IMIS PRODUCT R 0000004230 REV. DATE PETROLEUM DIL 10/22/85 SOLVENT REFINED PARAFFINIC DISTILLATE CHEMICAL FAMILY DETROLEUM HYDROCAPRON ISUN REFINING AND MARKETING COMPANY TEN PENN CENTER 1801 MARKET STREET PA 19103 INFORMATION SUPPLIED BY RAMONA D. PANSON 12151 293-6323 AND PHONE SEVERELY SOLVENT REFINED. HYDROTREATED LIGHT PARAFFINIC DISTILLATE 100% IS A COMPLEX COMBINATION OF Tydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominately of Saturated Hydrocarbons Having Carbon Numbers predominantly in the range of C15 thru C30 and produces a VAPOR PRESSURE: pH INFORMATION:pH N/A (mm Hg AT 20°C) < 0-94 VAPOR DENSITY: OCTANOL/WATER SOLUBILITY IN H,O: (% BY VOL.) PARTITION COEFFICIENT:_N_D_ % VOLATILES BY VOL.: APPEARANCE PALE FLUID
AND ODOR: NO ODOR **EVAPORATION RATE:** ODOR THRESHOLD (ppm) N.D. (ETHYL ETHER = 1)LOCOX SLOWER 4 19 °C. | AUTOIGNITION TEMPERATURE: 596 FSTIMATED ___°F.313 FSTIMATED HAZARD RATING FLAMMABLE LIMITS IN AIR LEAST SLIGHT LOWER EXPLOSIVE LEVEL (LEL) _____ NOT DETERMINED 1 MODERATE HIGH **EXTREME**

FIRE AND EXPLOSION HAZARDS

LAW SE HADE TO BURN (FLASH POINT GREATER THAN 200F).

0

SUN CODE

R0000DD42301

MATERIAL SAFETY DATA SHEET	PAGE 2 SUN CODE
Service	-000004230
EXTINGUISHING MEDIA	SPECIAL FIRE FIGHTING INSTRUCTIONS
ATER FOG. CHEMICAL FOAM. DRY CHEMICAL POWDER. ARBON DIOXIDE.	WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIRE FIGHTING IN CONFINED SPACE.
SECTION 5 HEALTH HAZARD INFORMATION SEXPOSURE LIMITS	
TR. TIME WEIGHTED PERMISSIBLE EXPOSURE 5.0 MG/M3	• GOVERNMENT REGULATION.
ROUTES OF EXPOSURE AND EFFECTS	
HALATION NO ACUTE EFFECTS EXPECTED TO TWICE EXPOSURE	E LIMIT.
SIMPRACTICALLY NON-TOXIC IF ABSORBED (LD50 GREATER EPEATED CONTACT. ESTIMATED DRAIZE SKIN IRRITATION ABBITS IS: > 5.000 MG/K3	R THAN 2000 MG/KG). MILD IRRITATION WITH PROLONGED OR N SCORE IS: 0.6 OUT OF 8.0 ESTIMATED DERMAL LU50 IN
* NO EYE EFFECT EXPECTED.	
GESTION HARMFUL OR FATAL IF SWALLDWED. PULMONARY AS STIMATED LD50 IN RATS IS: > 30 GRAMS PER KILO	SPIRATION HAZARD IF SWALLOWED AND VOMITING OCCURS. OGRAM OF RAT BOD
FIRST AID HALATION NONE NORMALLY REQUIRED.	
IN WASH WITH SOAP AND MATER UNTIL NO ODOR REMAINS	S. WASH CLOTHING BEFORE REUSE.
* FLUSH WITH WATER. IF IRRITATION PERSISTS. OBTAI	IN MEDICAL ASSISTANCE.

AGESTION DO NOT INDUCE VOMITING! DO NOT SIVE LIQUIDS! OBTAIN MEDICAL ASSISTANCE. SMALL AMOUNTS WHICH CCIDENTALLY ENTER MOUTH SHOULD BE RIVSED OUT UNTIL TASTE OF IT IS GONE.

STRONG OXIDIZERS

• • • • • •

INCOMPATIBLE MATERIALS

HAZARDOUS DECOMPOSITION PRODUCTS

CARBON MONUXIDE AND ASPHYXIANTS

SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)
STABILITY

TABLE.

PAGE 3

SUN CODE

R0000062301

POLYMERIZATION

ORIGINAL (Real)

OLYMERIZATION WILL NOT DECUR.

SECTION 7 PROTECTION INFORMATION

. VENTILATION

ENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT.

FIRSONAL PROTECTIVE EQUIPMENT

* PRODUCT MINIMALLY IRRITATING TO EYES. LOCAL SAFETY POLICY DECISION.

OVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED.

SPÍRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION. ESPIRATORY PROTECTION.

THER IF CONTACT IS UNAVOIDABLE. WEAR IMPERVIOUS PROTECTIVE SEAR. LAUNDER SOILED CLOTHES.

SECTION 8 DISPOSAL PROCEDURES

AQUATIC TOXICITY

OT DETERMINED

SPILL, LEAK OR RELEASE

ONTAIN SPILL. ADVISE EPA; STATE AGENCY IF REQUIRED. ABSORB ON INERT MATERIAL.

WASTE DISPOSAL

OLLOW FEDERAL. STATE AND LOCAL REGULATIONS. DO NOT FLUSH TO DRAIN/ STORM SEWER. INCINERATE UNDER ONTROLLED CONDITIONS. CONTRACT TO AUTHORIZED DISPOSAL SERVICE.

SECTION 9 SPECIAL PRECAUTIONS

STORAGE AND HANDLING CONDITIONS

FPA CLASS IIIB STORAGE. AVOID PROLONGED BREATHING OF MIST OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT ITH SKIN. WASH THOROUGHLY AFTER HANDLING.

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

O ADDITIONAL PRECAUTIONS AND LABELS

SUN CODE

R00000013102

MATERIAL SAFETY DATA SHEET

AN BE MADE TO BURN (FLASH POINT GREATER THAN 200F).

 $\cdot \cdot (\cdot)_{\cdot,\cdot}$

SUR	Sun Refining and Marketing Company	J	·	COMPLIANC	LLY TO ASSI E WITH HEAL	ST DUR CU TH/SAFETY	ON IS PROVIDED STOMERS IN ASSESS /ENVIRONMENTAL HIS TO YOUR MANAGE	
PRINTED:	.85/12/07			OF SAFETY	AND HEALTH	21 21HT al	THE FIRST FORM	
	IDENTIFICATION			PRINTELL	OR YOU FOR	THIS PRUD	UC I	ROODOO013102
JAME SUNTH	ENE 4240	SYNONYMS						REV. DATE 10/02/85
AS REGISTRY N	0. 743 E3 E	S NAME						10/02/07
***************************************	64742-52-5	HYURUTRE	ALED HE	HEHTHEN YVA		1 €		
i			٦	CHEMIC	AL FAMILY	LEUM OTI		
•	UNIVERSAL CONTAI! Steel Drum Corpo! 2nd & Price Stre! Trainer	RATION	·	TEN	REFINING	RKETING C	OMPANY KET STREET 19103	
1				INFOR	MATION SUPPLIED BY			····
'	_			AND F	HONE	JONATHAN	Mahaas	
SECTION 2 MATERIAL(S)	INGREDIENTS					12151 293	-6321	
ONSISTS RODUCES SECTION 3	OF HYORDCARBONS A FINISHED DIL DI PHYSICAL DATA	HAVING HYDROCA E APPRIX. 2400	RBON NU SUS AI	MBERS PREDOM 100F. IT CO	H HYDROGEN INANTLY IN MIAINS RELA	IN THE PR THE RANGE TIVELY FE	A COMPLEX COMBINA ESENCE DF A CATAL OF C20 THROUGH (W NORMAL PARAFEIN	YŠŤ. ĬŤ 50 AND IS-
30ILING POINT: 7	60 mm Hg WIDE RAYS	E . F. MIDE RANGE	°C VAI	POR PRESSURE: (mm POR DENSITY: (Hg AT 20°C) (0 AIR = 1)	1000	pH INFORMATION:pH	_@ g/l H ₂ O
MELTING POINT:	N/A	_ °F N/A	°c so	LUBILITY IN H2O: (% BY	VOL.)		OCTANOL/WATER PARTITION COEFFICIENT:	
PECIFIC GRAVITY	r: (H ₂ O=1) <u>D.93</u>	<u> </u>	% v	OLATILES BY VOL.:	NTI		ADDEADANCE DATE NOT	
ACKING DENSITY	V ()		4	PORATION RATE: THYL ETHER = 1)	1000 X S	LOWER	APPEARANCE PALE YEL AND ODOR: LITTLE (ODOR THRESHOLD (ppm)	inne
-SECTION-4-	FIRE AND EXPLOSION DA	TA (CONT ON PAGE 2)						
	430 MINIMUM COS	°F.222 MINIMUM	COC °C	AUTOIGNITION TEMPER	ATURE: 705 F	STIMATED		••c.
	NFPA CLASSIFICATIO	N	HAZ	ARD RATING	T	FLAN	MABLE LIMITS IN AIR	
EALTH	FIRE REAC	CTIVITYO	LEAS 0		LOWER EXPLOSIVE		MOT DETERMINED	% VOI
PECIFIC HAZARD			MODERATE 2	HIGH EXTREME 3 4			NOT DETERMINED	
FIRE AND	EXPLOSION HAZARDS			·				

• •(-)- •

D ADDITIONAL PRECAUTIONS AND LABELS



Sun Refining and Marketing Company

Marketing Company		PERIODICALLY COMPLIANCE W	TO ASSIST OUT	MATION IS PROVIDED R CUSTOMERS IN ASSI	
PRINTED: 85/12/07 SECTION 1 IDENTIFICATION		DE SYFELA VA	D HEALTH. THIS	RD THIS TO YOUR MAN S IS THE FIRST FORM PRODUCT	R00000012902
ME SUNTHENE 410	SYNONYMS				REV. DATE
	NAME HYDROTREATED HE	VY WAPHTHENT?	DISTILLATE		
UNIVERSAL CONTAINE STEEL DRUM CORPORA 2ND & PRICE STREET TRAINER	TIDY	PHILADE	PETROLEUM INING AND MARKETI N CENTER 1801 LPHIA N SUPPLIED BY JONATI	NG COMPANY MARKET STREET PA 19103 HAN M. HAAS	
SECTION 2 INGREDIENTS ATERIAL(S)			12151	293-6321	
EVERELY HYDROTREATED. CHEMINERAL DIL. 21CFR178.35200 JNSISTS OF HYDROCARBONS HARDOUCES A FINISHED DIL DE SECTION 3 PHYSICAL DATA	CI. OBTAINED BY TREAUTED. OBTAINED BY TREAUTING HYDROCARBON NULL APPROX. LOD SUS AT	HEAVY NAPHTHEN TING DIL WITH BERS PREDOMINA LOOF- CONTAINS	IC DISTILLATE HYDROGEN IN TO NILY IN THE RO RELATIVELY FE	DIL IS FOA APPROVE HE PRESENCE OF A CA ANGE OF C20 THROUGH H NORMAL PARAFFINS	ED THIRD GRADE ATALYST. IT H C50 AND
DILING POINT: 760 mm Hg HIDE RANGE	°F. HIDE RANGE °C VAP	OR PRESSURE: (mm Hg A OR DENSITY: (AIR =		ph INFORMATION:ph_N	
ECIFIC GRAVITY: (H,O=1)	_ % v	OLATILES BY VOL.:	MTI	ADDEADANCE COL DO	

cering roller.	-N/A	SOLUBILITY IN H ₂ O: (% BY	VOL.)	PARTITION COEFFICIENT:
ECIFIC GRAVITY	$(H_2O=1) \qquad \Omega = 9.9$	% VOLATILES BY VOL.:	— NIL	APPEARANCE COLORLESS F
CKING DENSITY:	Kg/m³ N/A	EVAPORATION RATE: (ETHYL ETHER = 1)	LOOD X SLOWER	AND ODOR: LITTLE ODOR ODOR THRESHOLD (ppm) 11 D
SECTION 4 FIRE	AND EXPLOSION DATA (CONT. ON PAGE 2)			

ASH POINT: 320 HINIMUM COL . F.159 MINIMUM COL . . C. AUTOIGNITION TEMPERATURE 675 ESTIMATED PRIST ESTIMATED

NFPA CLASSIFICATION HAZARD RATING FLAMMABLE LIMITS IN AIR LEAST **SLIGHT** ALTH. 0 FIRE 1 LOWER EXPLOSIVE LEVEL (LEL) __NOT DETERMINED 0 1

MODERATE HIGH **EXTREME** ECIFIC HAZARD FIRE AND EXPLOSION HAZARDS

UPPER EXPLOSIVE LEVEL (UEL) _____NOT_DETERMINED

AN BE MADE TO BURN (FLASH POINT GREATER THAN 200F).

SUN CODE R00000012902

: 1...

% VOL.

CARBON HONOXIDE AND ASPHYXIANTS.

STRONG DXIDIZERS.

STABLE.

• •

 $\cdots \cdot$

NFPA CLASS IIIB STORAGE. WASH THOROUGHLY AFTER HANDLING.

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

NO ADDITIONAL PRECAUTIONS AND LABELS



MAT

(Day)

Sun Refining and

Marketing Company

THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM PRINTED FOR YOU FOR THIS PRODUCT.

SUN CODE

SECTION 1 IDENTIFICATION	PRINIFIE	JR YOU FUR THIS PRO	100	K00000115500
SUN REFRIGERATION 430 SYNONYMS				REV. DATE 03/03/81
S REGISTRY NO. CAS NAME	IFICATION - MIXTURE			
UNIVERSAL CONTAINER STEEL DRUM CORPORATION 2ND & PRICE STREET TRAINER PA 19013 SECTION 2 INGREDIENTS ATERIAL(S)	CHEMIC SUN TEN PHIL INFORM AND P	AL FAMILY PLEND REFINING AND MARKETING PENN CENTER 1801 MAI ADELPHIA MATION SUPPLIED BY HONE RAMDNA P 12151 29	RKET STREET 19103 ANSON 3-6323	
OLVENT REFINED HEAVY PARAFFINIS DISTIL	LAIE, LAS #64/4188;	METHACKYLATE COPUL	MER WITH A TRACE	- UF SILICONE
SECTION 3 PHYSICAL DATA				
OILING POINT: 760 mm Hg HIGH WITH °F. HIDE RANGE **ELTING POINT: N/A °F. N/A **ECIFIC GRAVITY: (H,0=1) 0.85	°C VAPOR DENSITY: (°C SOLUBILITY IN H,O: (% BY % VOLATILES BY VOL.:	Hg AT 20°C) NEL AIR = 1)	ph information:ph	1.0 -LUID.
ACKING DENSITY: WHEN APPLICABLE) Kg/m³ M/A	EVAPORATION RATE: (ETHYL ETHER = 1)	LOOOX SLOWER	AND ODOR: SLIGHT ODOR THRESHOLD (ppm)	
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)				
EASH POINT: 425 MINIMUM COC "F.218 MINIMUM	CDC °C. AUTOIGNITION TEMPER	ATURE: 125 ESTIMATED	of 385 ESTIMATI	<u>- D</u> •c.
NFPA CLASSIFICATION	HAZARD RATING	FL	AMMABLE LIMITS IN AIR	
EALTH O FIRE 1 REACTIVITY 1	LEAST SLIGHT 0 1 MODERATE HIGH EXTREME	LOWER EXPLOSIVE LEVEL (LEL)		% VOL
PECIFIC HAZARD	2 3 4	UPPER EXPLOSIVE LEVEL (UEL) _	NOT DETERMINED	% VOL
FIRE AND EXPLOSION HAZARDS		<u> </u>		
AN BE MADE TO BURN (FLASH POINT GREATE	R THAN 200F).			SUN CODE R00000115500

.

. . . .

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

NO ADDITIONAL PRECAUTIONS AND LABELS

PRINTED: 85/12/07
SECTION 1 IDENTIFICATION

TRAINER

SUNTRANS II

AS REGISTRY NO.

MATERIAL SAFETY DATA SHEET

SYNONYMS

24 19013

. . .

CAS NAME

Sun Refining and **Marketing Company**

UNIVERSAL CONTAINER STEEL DRUM CORPORATION 2ND & PRICE STREET

THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM SUN CODE PRINTED FOR YOU FOR THIS PRODUCT R00000126800 REV. DATE 11/27/85 NO CLASSIFICATION -- MIXTURE CHEMICAL FAMILY SUN REFINING AND MARKETING COMPANY TEN PENN CENTER 1801 MARKET STREET PHILADEL PHIA PA 19103 INFORMATION SUPPLIED BY RAMUNA PANSON AND PHONE

SECTION 2 INGREDIENTS					
ATERIAL(S)				DETROLEUM	
*HEMICALLY NEUTRALIZED, SEVERELY HYDROT *5-DI-TERT-BUTYLPHENOL TAS# 5875-45-6.	REATE	D. LIGHT NAP	HIHENIC DISTILLATE (PETROLEUMI CAS# 64742-52	2-51
TO DE TERT DOTTE HENDE SAST 3013 43 30					
SECTION 3 PHYSICAL DATA		· · · · · · · · · · · · · · · · · · ·			
į.					
OILING POINT: 760 mm Hg MIDE RANSE of HIDE RANSE	I .	VAPOR PRESSURE: () VAPOR DENSITY:	mm Hg AT 20°C) 0.008 (AIR = 1) 8	pH INFORMATION:pH_N/A_@	g/l H ₂ O
# A SE NAME OF THE PARTY OF THE	1			OCTANOL/WATER	
TELTING POINT: N/A "F. N/A	—°c │	SOLUBILITY IN H,O: (%	BY VOL.)NTL	PARTITION COEFFICIENT: N.D.	
PECIFIC GRAVITY: (H ₂ O=1) 0.83		% VOLATILES BY VOL.:	NIL.	APPEARANCE COLORLESS FLI	JID.
ACKING DENSITY:		EVAPORATION RATE:		AND ODOR: LITTLE ODDR.	
WHEN APPLICABLE) Kg/m3 N/A		(ETHYL ETHER = 1)	LOOOK SLOHER	ODOR THRESHOLD (ppm) Note	
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)					
LASH POINT: 293 MINIMUM CJC of 145 MINIMUM	cac_	.C. AUTOIGNITION TEN	PERATURE: 605 ESTIMATE	O OF 318 ESTIMATED	°C.
NFPA CLASSIFICATION		HAZARD RATING		FLAMMABLE LIMITS IN AIR	
EALTH O FIRE 1 REACTIVITY 3	LI	EAST SLIGHT	LOWER EXPLOSIVE LEVEL (LEL)	NOT DETERMINED	% vol
PECIFIC HAZARD	MODER 2	· -	ME UPPER EXPLOSIVE LEVEL (UEL)	NOT DETERMINED	% VOL
FIRE AND EXPLOSION HAZARDS	· · · · · · · · · · · · · · · · · · ·				
AN BE MADE TO BURN IFLASH POINT GREATE	R THA	N 200F).	,	R 00 00	SUN CODE

SUN CODE

Bulletin Bul	.0000012680
EXTINGUISHING MEDIA	SPECIAL FIRE FIGHTING INSTRUCTIONS
ATER FOG. CHEMICAL FOAT. DRY THEMICAL POWDER. ARBON DIOXIDE.	HEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIRE FIGHTING IN CONFINED SPACE.
·	
SECTION 5 HEALTH HAZARD INFORMATION	
EXPOSURE LIMITS	
HR. TIME WEIGHTED PERMISSIBLE EXPOSURE 5.0 MG/M3 .	SUN RELUMBENDATION.
ROUTES OF EXPOSURE AND EFFECTS	
HALATION EXCESSIVE EXPOSURES MAY CAUSE IRRITATION TO XPOSURE LIMIT.	EYES. NOSE. THROAT. NO ACUTE EFFECTS EXPECTED TO TWICE
KIN PRACTICALLY NON-TOXIC IF ABSORBED (LD50 GREATER ILS & FATS FROM SKIN WITH PROLONGED OR REPEATED COUT OF 8.0 ESTIMATED DERMAL LD50 IN RABBITS IS: >	THAN 2000 MG/KG). MODERATE IRRITATION REMOVES NATURAL NTACT. ESTIMATED DRAIZE SKIN IRRITATION SCORE IS: 4.0 5.000 MG/KG
YE CONTACT WITH THE EYE MAY CAJSE MILD IRRITATION.	
NGESTION HARMFUL DR FATAL IF SWALLDWED. PULMDNARY ASP STIMATED LD50 IN RATS IS: >15 GRAMS PER KILOG	
FIRST AID	
HALATION MOVE PERSON TO FRESH AIR.	
KIN WASH WITH SOAP AND WATER UNTIL NO ODOR REMAINS.	WASH CLOTHING BEFORE REUSE.

YE FLUSH WITH WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS. OBTAIN MEDICAL ASSISTANCE.

 $\dots (c) \cdot \dots$

NGESTION DO NOT INDUCE VOMITING! DO NOT SIVE LIQUIDS! OBTAIN MEDICAL ASSISTANCE. SMALL AMOUNTS WHICH CCIDENTALLY ENTER MOUTH SHOULD BE RINSED OUT UNTIL TASTE OF IT IS SOME.

SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)		
STABILITY	INCOMPATIBLE MATERIALS	HAZARDOUS DECOMPOSITION PRODUCTS
TABLE.	STRONG UXIDIZERS.	CARBON MONOXIDE AND ASPHYXIANTS

LEPA CLASS IIIB STORAGE. AVDID PROLONGED BREATHING OF MIST OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT

400

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

10 ADDITIONAL PRECAUTIONS AND LABELS

ORIGINAL (Red)

MATERIAL SAFETY DATA SHEET

Sun Refining and Marketing Company THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM

SUN CODE

SECTION 1 IDENTIFICATION	PRINTED FO	R YOU FOR 141S PRODUCT	
SYNONYMS	EUM DISTILLATE		REV. DATE 10/28/85
S REGISTRY NO. CAS NAME			
64741-88-4 SOLVENT F	12. 2.12. 17.2.11.	INIC DISTILLATE (PETROLEUM) L FAMILY PETROLEUM HYDROCARRON DIL	
UNIVERSAL CONTAINER STEEL DRUM CORPORATION 2ND & PRICE STREET TRAINER PA 19013	TEN P	EFINING AND MARKETING COMPANY ENN CENTER 1801 MARKET STREET DELPHIA PA 19103	
L	INFORMA AND PH	TION SUPPLIED BY ONE RAMONA D. PANSON 12151 293-6323	
SECTION 2 INGREDIENTS ATERIAL(S)			
EVERELY SOLVENT REFINED, HEAVY PARAFFI BTAINED AS THE RAFFINATE FROM A SOLVEN YDROCARBONS HAVING CARBON NUMBERS PREDI E APPROXIMATELY 200 TO 215 SUS AT 100F SECTION 3 PHYSICAL DATA	NIC DISTILLATE 100% T EXTRACTION PROCESS OMINANTLY IN THE RAY	IS A COMPLEX COMBINATION OF HY IT CONSISTS PREDOMINANTLY OF SE OF C20 THRU C50 AND PRODUCE	DROCARBONS OF SATURATED ES A FINISHED OIL
OILING POINT: 760 mm Hg WIDE RANGE OF WIDE RANGE	°C VAPOR DENSITY: (A	Ig AT 20°C) < 3 • 00 0 1 ph INFORMATION: R = 1)	, •
ELTING POINT: N/A	°C SOLUBILITY IN H,O: (% BY	VOL.) PARTITION COEFF	FICIENT: N.D.
PECIFIC GRAVITY: (H ₂ O=1) 0.85	% VOLATILES BY VOL.:		ABER FLUID
ACKING DENSITY: WHEN APPLICABLE) Kg/m ³ N/A	EVAPORATION RATE: (ETHYL ETHER = 1)	AND ODOR: ST LOUDX SLOWER ODOR THRESHOLD	ICHT UDDR
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)			
ASH POINT: 410 MINIMUM COC .F.210 MINIMUM	EDE .c. AUTOIGNITION TEMPERA	TURE: 670 ESTIMATED .F. 356 ES	STIMATED
NFPA CLASSIFICATION	HAZARD RATING	FLAMMABLE LIMITS IN	AIR
EALTH _O FIRE _1 REACTIVITY	LEAST SLIGHT 0 1	LOWER EXPLOSIVE LEVEL (LEL)NOT_DETERM	LNED % VOL
PECIFIC HAZARD	MODERATE HIGH EXTREME 2 3 4	UPPER EXPLOSIVE LEVEL (UEL)NOT OFTERMI	INED % VOL
FIRE AND EXPLOSION HAZARDS			
AN BE MADE TO BURN (FLASH POINT GREATE	R THAN 200Fl.		SUN CODE R00000125001

N WASH WITH SOAP AND WATER UNTIL NO ODDR REMAINS. WASH CLOTHING BEFORE REUSE.

FLUSH WITH WATER. IF IRRITATION PERSISTS. OBTAIN MEDICAL ASSISTANCE.

SESTION VOMITING MAY BE INDUCED BUT IS NOT REQUIRED. OBTAIN MEDICAL ASSISTANCE. SMALL AMOUNTS WHICH CIDENTALLY ENTER MOUTH SHOULD BE RINSED OUT UNTIL TASTE OF IT IS SONE.

SECTION 6 REACTIVITY DATA (CONT. ON PAGE	: 3)	
STABILITY	INCOMPATIBLE MATERIALS	HAZARDOUS DECOMPOSITION PRODUCTS
ABLE.	STRONG OXIDIZERS	CARBON MONOXIDE AND ASPHYXIANTS
•	·	

SUN CODE

R00000125001

POLYMERIZATION

DLYMERIZATION WILL NOT DCCUR.

SECTION 7 PROTECTION INFORMATION

VENTILATION

ENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT.

PERSONAL PROTECTIVE EQUIPMENT

F PRODUCT MINIMALLY IRRITATING TO EYES. LOCAL SAFETY POLICY DECISION.

OVES PRODUCT MINIMALLY IRRITATING TO SKIN. LOCAL SAFETY POLICY DECISION.

SPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY VIOSH CERTIFIED RESPIRATORY PROTECTION. ESPIRATORY PROTECTION.

HER IF CONTACT IS UNAVOIDABLE. WEAR IMPERVIOUS PROTECTIVE GEAR. LAUNDER SOILED CLOTHES.

SECTION 8 DISPOSAL PROCEDURES

AQUATIC TOXICITY

OT DETERMINED

SPILL, LEAK OR RELEASE

ONTAIN SPILL. ADVISE EPA; STATE AGENCY IF REQUIRED. ABSORB ON INERT MATERIAL.

. . . .

WASTE DISPOSAL

OLLOW FEDERAL. STATE AND LOCAL REGULATIONS. DO NOT FLUSH TO DRAIN/ STORM SEWER. INCINERATE UNDER UNTROLLED CONDITIONS. CONTRACT TO AUTHORIZED DISPOSAL SERVICE.

SECTION 9 SPECIAL PRECAUTIONS

STORAGE AND HANDLING CONDITIONS

FPA CLASS IIIB STORAGE. AVOID PROLONGED BREATHING OF MIST OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT ITH SKIN. WASH THOROUGHLY AFTER HANDLING.

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

O ADDITIONAL PRECAUTIONS AND LABELS



_		123	1250	
	\sim	8	100	-
==	=	靐	=	_
		20L	100	-
	_	21H	120.	\sim
_	-	-	100	-

Sun Refining and Marketing Company

T	н	IS	_	P	RO	D	uc	T	•	S AI	F E	T	Y	I	N	FO	R	MA	T	O	N	I	S	P	RC	V	I D	ED	,		
																													ES	SI	N
c	ō	MP	Ĺ	Ī	AN	C	Ē	ù	I	ΪĤ	H	ΪĒ	ÃĽ	. Ť	Ĥ	/s	Ã	FE	۲ì	ĬĬ	EI	۱V	IR	0	NP	IÉI	NT	AL			
																													NA	61	ER
വ	F	9	A	F	FI	· Y	Δ	Ň	n	н	: A		T4	1		TH	1 7	9	1 9	2	TH	IF	5	T	05	T	F	O S	100		

SUN CODE

PRINTED: 85/11/30	PRINTED	OR YOU FOR THIS PRODUCT	R000001425
NAME SUNVIS 775 (153) SYNONYMS			REV. DATE 12/17/81
1040 DECICEDY NO 1040	LASSIFICATION - MIXTURE		
UNIVERSAL CONTAINER STEEL DRUM CORPORATION 2ND & PRICE STREET TRAINER PA 19 SECTION 2: INGREDIENTS MATERIALIS) SOLVENT REFINED HEAVY PARAFFINIC DI METHACRYLATE COPOLYMER; AND A TRACE AND 0.052% PHOSPHORUS.	CHEMI S UN T EN PHIL INFOR	REFINING AND MARKETING COMPANY PENN CENTER 1801 MARKET STRI ADELPHIA PA 19103 MATION SUPPLIED BY PHONE RAMONA PANSON (215) 293-6323	
SECTION 3. PHYSICAL DATA			
BOILING POINT: 760 mm Hg HIDE RANGE °F. HIDE F MELTING POINT: N/A °F. N/A SPECIFIC GRAVITY: (H ₂ O=1) Q.88 PACKING DENSITY: ALCA	VAPOR PRESSURE: (mm VAPOR DENSITY: SOLUBILITY IN H ₂ O: (% B VOLATILES BY VOL.: EVAPORATION RATE:	(AIR = 1)	COEFFICIENT: N.D.
(WHEN APPLICABLE) Kg/m³ N/A	(ETHYL ETHER = 1)	1000X SLOWER ODOR THRE	SHOLD (ppm) N.D.
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAG	E 2)		
FLASH POINT: 490 MINIMUM COC .F. 254 MINI	MUN COC AUTOIGNITION TEMPE	RATURE: 730 ESTINATED F. 388	<u>ESTIMATED</u> °C.
NFPA CLASSIFICATION	HAZARD RATING	FLAMMABLE LIM	ITS IN AIR
HEALTH 0 FIRE 1 REACTIVITY 0	LEAST SLIGHT 0 1 MODERATE HIGH EXTREME 2 3 4	LOWER EXPLOSIVE LEVEL (LEL) NOT DET UPPER EXPLOSIVE LEVEL (UEL) NOT DET	
CAN BE MADE TO BURN (FLASH POINT G	REATER THAN 200F).		SUN COD ROGO QO14 250 C

••

MATERIAL SAFETY DA	ATA SHEET	PAGE 2	SUN CODE
EXTINGUISHING MEDIA		SPECIAL FIRE FIGHTING INSTRUCTIONS	1000014250
TATER FOG. CHEMICAL FOAM. DRY CHEMICA CARBON DIOXIDE.		AR SELF-CONTAINED BREATHING GHING IN CONFINED SPACE.	APPARATUS WHEN FIRE
SECTION 5 HEALTH HAZARD INFORMATION			Fig. 14
EXPOSURE LIMITS SHR. TIME WEIGHTED PERMISSIBLE EXPOSU	RE 5.0 MG/M3 . SUN F	ECOMMENDATION.	
ROUTES OF EXPOSURE AND EFFECTS			
NHALATION NO EFFECTS EXPECTED.			
	•		
SKIN PRACTICALLY NON-TOXIC IF ABSORBED	CLDSU GREATER THAN	000 MG/KG). NO SKIN EFFECTS	EXPECTED.
		-	
EYE CONTACT WITH THE EYE MAY CAUSE TEM	PORARY STARTING. NO	PERMANENT DAMAGE EXPECTED.	
			,
INGESTION PRACTICALLY NON-TOXIC (LD50 >	156/KG).		
FIRST AID INHALATION NONE NORMALLY REQUIRED.			
· · · · · · · · · · · · · · · · · · ·			
SKIN WASH WITH SOAP AND WATER UNTIL NO) ODOR REMAINS. WASH	CLOTHING BEFORE REUSE.	
	•		
PIII			
EVE FLUSH WITH WATER.			
•			
INGESTION GIVE LIQUIDS AND INDUCE VOMITING	IG IINI FSS VICTIM IS	INCONSCIOUS OBTAIN MEDICAL	ASSISTANCE SMALL
AMOUNTS WHICH ACCIDENTALLY ENTER MOUT	TH SHOULD BE RINSED	OUT UNTIL TASTE OF IT IS GON	IE.
SECTION 6 PREACTIVITY DATA (CONT. ON PAGE 3)		475014.C	UC DECOMPOSITION PRODUCTS
STABLE.	STRONG OXIDIZERS.		US DECOMPOSITION PRODUCTS (IDE AND ASPHYKIANTS
3 I VAFE	SINGING CATAILE 42.	CARDON MONO	ITAL MAN MALILIATURIA

ORIGINA (Rea)

MATERIAL SAFETY DATA SHEET

CAN BE MADE TO BURN (FLASH POINT GREATER THAN 200F).

Sum

Sun Refining and Marketing Company THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM

SUN CODE

R000000372300

SECTION 1 IDENTIFICATION	PRINTE	D FOR YOU FOR THIS PRODUCT	<u> </u>
NAME SUNVIS 831 WR (68) SYNONYMS			REV. DATE 0.6/11/81
CAS REGISTRY NO.	IFICATION - MIXI	IRF	UD/11/01
·		PETRIL FUM BLEND	
UNIVERSAL CONTAINER STEEL DRUM CORPORATION 2ND & PRICE STREET TRAINER PA 19013) 1 F	AND MARKETING COMPANY TEN PENN CENTER 1801 MARKET STRI PHILADELPHIA PA 19103	EFT
SECTION 2 INGREDIENTS		INFORMATION SUPPLIED BY AND PHONE RAMONA PANSON (215) 293-6323	·
MATERIALIS) BLEND OF SOLVENT REFINED HEAVY PARAFFINE TO CONTAIN SULFUR, ZINC, PHOSPHORUS) DEFOAMER.		CASM 6474188%); PROPRIETARY A WITH TRACE OF METHACE CALLYZINC 0.382%; PHOSPHORUS	S VI ATE CODOL VMED AND
SECTION 3 PHYSICAL DATA			
BOILING POINT: 760 mm Hg HIGH WITH °F. WIDE RANGI MELTING POINT:N/A °F	VAPOR PRESSURE: VAPOR DENSITY: SOLUBILITY IN H,O:	(AIR = 1) 15t OCTANOLV	
SPECIFIC GRAVITY: (H ₂ O=1) <u>G.87</u> PACKING DENSITY: Kg/m ³ N/A	% VOLATILES BY VOLATION RATE (ETHYL ETHER =	DL:: NIL APPEARANC AND ODOR:	E AMBER FILLID SI IGHI ODOR SHOLD (ppm) N.D.
FLASH POINT: 425 COC MINIMUM of	°C. AUTOIGNITION 1	EMPERATURE: 700 ESTIMATED .F.	°C.
NFPA CLASSIFICATION	HAZARD RATING	FLAMMABLE LIM	TS IN AIR
HEALTH O FIRE 1 REACTIVITY U	LEAST SLIGHT 0 1 MODERATE HIGH EXT	LOWER EXPLOSIVE LEVEL (LEL) NOT DET	
	2 3	4 UPPER EXPLOSIVE LEVEL (UEL) NOT DET	ERMINED % \
FIRE AND EXPLOSION HAZARDS			
			SUN CODE

SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)
STABILITY

STABLE.

ODE

HAZARDOUS DECOMPOSITION PRODUCTS
CARBON MONOXIDE AND ASPHYXIANTS

ORIGI, (Red)	MATERIAL SAFETY DATA SHEET	PAGE 2	SUN CO
		·	
EXTINGUISHING MED	DIA	SPECIAL FIRE FIGHTING INSTRUCTIONS	
CARBON DIOXIDE.	CAL FOAM. DRY CHEMICAL POWDER.	WEAR SELF-CONTAINED BREATHING FIGHTING IN CONFINED SPACE.	APPARATUS WHEN FIRE
SECTION 5 HEALTH EXPOSURE LIMITS	HAZARD INFORMATION		
BHR. TIME WEIGHT	ED PERMISSIBLE EXPOSURE 005.0 MG/M	S . SUN RECOMMENDALION.	
ROUTES OF EXPOSU			
INHALATION NO EFFECT			
SKIN PRACTICALLY N REPEATED CONTACT	ION-TOXIC IF ABSORBED (LD50 GREATER	THAN 2000 MG/KG). MILD IRRITATION	WITH PROLONGED OR
CO PANYARY WYYU			
FAF CONINCI MIIN	THE EYE MAY CAUSE MILD IRRITATION.		
		·	
INGESTION PRACTICAL	LY NON-TOXIC (LDSU > 15G/KG).		
FIRST AID			
	RMALLY REQUIRED.		
SKIN HASH HITH SC	DAP AND WATER UNTIL NO ODOR REMAINS.		
	on and water dutie no obor keaking.		
EYE FLUSH WITH WA	TER FOR AT LEAST 15 MINUTES. IF IR	RITATION PERSISTS, OBTAIN MEDICAL	ASSISTANCE.
INGESTION GIVE I TO:IT	DS AND INDUCE VOMITING UNLESS VICT	IN TO HACANCETALIC ADTAVAL MATERIAL	
AMOUNTS WHICH A	CIDENTALLY ENTER MOUTH SHOULD BE R	INSED OUT UNTIL TASTE OF IT IS GON	ASSISTANCE. SMALL E.
			- - .

INCOMPATIBLE MATERIALS
INCOMPATIBLE WITH
STRONG OXIDIZERS

• • (*, • •

1.0

ORIGI (Reg	MATERIAL SAFETY DATA SHEET	PAGE 3	SUN COD
POLYMERIZATION			₩0 d000 3723
POLYMERIZATION W	LL NOT OCCUR.	7	
SECTION 7 PROTECTION	ON INFORMATION	· · · · · · · · · · · · · · · · · · ·	
VENTILATION	N-N-VA AANAL V		
AEMITTALE WE WEEK	DED TO COMPLY WITH EXPOSURE LIMIT.		
PERSONAL PROTECTIV	E EQUIPMENT		
EYE SPLASH PROOF	CHETICAL GOGGLES		
GLOVES IMPERVIOUS	GLOVES RECOMMENDED WHEN PROLONGED SKIN CON	TACT CANNOT BE AVOIDED.	
i i			
RESPIRATOR CONCENTRA	TION-IN-AIR DETERMINES PROTECTION NEEDED.	Har Ann Marca a company	
	. 10 TH NIR DETERMINES PROTECTION NEEDED.	NE ONLY NIDSH CERTIFIED	RESPIRATORY PROTECTION.
OTHER NONE NORMALLY	/ NEEDED		
HONE HORALE	WEEDED.		
SECTION 8 DISPOSA AQUATIC TOXICITY	L PROCEDURES		
NOT DETERMINED			
COUL LEAV OR DELE	A07		
ABSORB ON INERT	ASE MATE DI AI		
on inchi	INICRIAL.		
WASTE DISPOSAL			
FOLLOW FEDERAL	STATE AND LOCAL REGULATIONS.		
, , , , , , , , , , , , , , , , , , , ,	THE MED BOOK REDUCKIE ON US		
	•		
SECTION-9 SPECIAL P	RECAUTIONS		
STORAGE AND HANDI	LING CONDITIONS		
NFPA CLASS IIIB	STORAGE.		

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)
NO ADDITIONAL PRECAUTIONS AND LABELS



SUN

Sun Refining and Marketing Company THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM

SUN CODE

PRINTED: 85/11/30 SECTION 1 IDENTIFICATION	OF SAFI PRINTEI	TY AND HEALTI. THIS PR	IS THE FIRST FORM ROUGT RO	0000 37230
SUNVIS 831 WR (68)			REV. D	OATE OA 4 9 4 9 4
'AS DEGISTRY NO.	IFICATION - MIXTU	ID F		06/11/81
UNIVERSAL CONTAINER STEEL DRUM CORPORATION ZND & PRICE STREET TRAINER PA 19013 SECTION 2 INGREDIENTS MATERIAL(S) BLEND OF SOLVENT REFINED HEAVY PARAFFING CONTAIN SULFUR, ZINC, PHOSPHORUS) DEFOAMER.	CH ST PI IN AT	EMICAL FAMILY PETROL FUM BL IN REFINING AND MARKETING EN PENN CENTER 1801 M ILLAD ELPHIA FORMATION SUPPLIED BY ID PHONE RAMONA (215) 2 CASN 64741886); PRO	COMPANY ARKET STREET A 19103 PANSON 93-6323 PRIETARY ANTIOXIDANT (OF METHACRY ATE COROL	KNO UN
SECTION 3 PHYSICAL DATA	VAPOR PRESSURE	(mm Hg AT-20°C) BELOW-0001		0/1 H.
MELTING POINT: 760 mm Hg HIGH WITH °F. WIDE RANGE MELTING POINT: N/A °F.	°C VAPOR DENSITY: °C SOLUBILITY IN H,O: (5	(AIR = 1) 15F	OCTANOL/WATER PARTITION COEFFICIENT: N. D.	g/i H2
PACKING DENSITY: (H ₂ O=1)	% VOLATILES BY VOL EVAPORATION RATE: (ETHYL ETHER = 1)	1000 X SLOWER	APPEARANCE AMRER FLUID AND ODOR: IGHT ODOR ODOR THRESHOLD (ppm) N.D.	
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)			<u> </u>	
FLASH POINT: 425 COC MINIMUM .F.	°C. AUTOIGNITION TE	APERATURE: 700 ESTIMATE	Dof,	°C,
NFPA CLASSIFICATION	HAZARD RATING	F	LAMMABLE LIMITS IN AIR	
REALTH 0 FIRE 1 REACTIVITY U	LEAST SLIGHT 0 1 MODERATE HIGH EXTRE	LOWER EXPLOSIVE LEVEL (LEL)	NOT DETERMINED	% vc
PECIFIC HAZARD	2 3 4	UPPER EXPLOSIVE LEVEL (UEL)	NOT DETERMINED	% vc
AN BE MADE TO BURN (FLASH POINT GREATE	R THAN 200F).		RODO	SUN CODE 00372300

MGINAL Red)	MATERIAL SAFETY DATA	SHEET		PAGE 2	SUN COD
					_J0000372
ECTINGUISHING MED			SPECIAL FIRE FIGHTING	INSTRUCTIONS	
CARBON DIOXIDE.	CAL FOAM. DRY CHEMICAL P	OWDE R.	WEAR SELF-CONTAIN FIGHTING IN CONFI	ED BREATHING APPARATU NED SPACE.	S WHEN FIRE
SECTION 5 HEALTH	HAZARD INFORMATION				
SHR. TIME WEIGHT	ED PERMISSIBLE EXPOSURE	005.0 MG/M3 .	SUN RECOMMENDALION	l.	
ROUTES OF EXPOSU		· · · · · · · · · · · · · · · · · · ·			
NHALATION NO EFFECT	S EXPECTED.				
SKIN PRACTICALLY N REPEATED CONTACT	ON-TOXIC IF ABSORBED (LD	50 GREATER TH	AN 2003 MG/KG). MIL	D IRRITATION WITH PRO	LONGED OR
•					
EYE CONTACT WITH	THE EYE MAY CAUSE HILD I	RRITATION.			
INGESTION PRACTICAL	LY NON-TOXIC (LD5U > 15G	7KG).			
:		•			
FIRST AID					
NHALATION NONE NO	RMALLY REQUIRED.				
SKIN WASH WITH SC	DAP AND WATER UNTIL NO OD	OR REMAINS.		·	
EVE FILISH WITH WA	ATER FOR AT LEAST 15 MINU	ITES. IF IRRIT	ATION PERSISTS, ORI	TATN MEDICAL ASSISTANC	F
				*	••
AMOUNTS WHICH A	IDS AND INDUCE VOMITING UCCIDENTALLY ENTER MOUTH S	INLESS VICTIM SHOULD BE RINS	IS UNCONSCIOUS. OBT ED OUT UNTIL TASTE	TAIN MEDICAL ASSISTANC OF IT IS GONE.	E. SMALL
			·		
	TY DATA (CONT. ON PAGE 3)			1	
STABLE.	STABILITY I NO 0	INCOMPATIB ONPATIBLE WITH	LE MATERIALS	HAZARDOUS DECOMPOSI CARBON MONGXIDE AND A	
o i unero		ONG OXIDIZERS		CAROUN HUNUALUE AND A	SCHIYTMI 2

•••

	· AB	MATERIAL SAFETY DATA SHEET	PAGE 3	SUN CODE
POLYMERIZATION WILL NOT OCCUR. SECTION 7 PROTECTION INFORMATION WENTILATION WENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT. WIST PERSONAL PROTECTIVE EQUIPMENT EYE SPLASH PROOF CHERICAL GOGGLES GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. RESPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIDSH CERTIFIED RESPIRATORY PROTECTION OTHER MOME NORMALLY NEEDED. SECTION 8 DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION-9—SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				x000003723
VENTILATION VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT. THE PERSONAL PROTECTIVE EQUIPMENT EVE SPLASH PROOF CHEMICAL GOGGLES GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. RESPIRATOR CONCENTRATION—IN—AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION OTHER NONE NORMALLY NEEDED. SECTION B DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION S SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	POLYMERIZATION POLYMERIZATION	WILL NOT OCCUR.		
VENTILATION VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT. THE PERSONAL PROTECTIVE EQUIPMENT EVE SPLASH PROOF CHEMICAL GOGGLES GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. RESPIRATOR CONCENTRATION—IN—AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION OTHER NONE NORMALLY NEEDED. SECTION B DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION S SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	SECTION 7 PROT	ECTION INFORMATION	· · · · · · · · · · · · · · · · · · ·	
PERSONAL PROTECTIVE EQUIPMENT EVE SPLASH PROOF CHEMICAL GOGGLES GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. RESPIRATOR CONCENTRATION—IN—AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION OTHER NONE NORMALLY NEEDED. SECTION B DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	VENTILATION			
GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. RESPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION OTHER NONE NORMALLY NEEDED. SECTION B. DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORD ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION-S. SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	VENTILATE AS A	EEDED TO COMPLY WITH EXPOSURE LIMIT.		
GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. RESPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION OTHER NONE NORMALLY NEEDED. SECTION B DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL LEAK OR RELEASE ABSORD ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS.				
RESPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION OTHER MONE NORMALLY NEEDED. SECTION B DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORD ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION-9 SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	EYE SPLASH PRO	F CHETICAL GOGGLES		
OTHER NONE NORMALLY NEEDED. SECTION 8 DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION 9 SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	GLOVES IMPERVIOL	JS GLOVES RECOMMENDED WHEN PROLONGED SKIN CON	TACT CANNOT BE AVOIDED.	
OTHER NONE NORMALLY NEEDED. SECTION 8 DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION 9 SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				
SECTION 8 DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—9—SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	RESPIRATOR CONCENT	TRATION-IN-AIR DETERMINES PROTECTION NEEDED.	USE ONLY NIOSH CERTIFIED RESPI	RATORY PROTECTION.
SECTION 8 DISPOSAL PROCEDURES AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—9—SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	OTHER NONE NORM	ALLY NEEDED.		
AQUATIC TOXICITY NOT DETERMINED SPILL, LEAK OR RELEASE ABSORB ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—— SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				
SPILL LEAK OR RELEASE ABSORD ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—9———————————————————————————————————				
SPILL, LEAK OR RELEASE ABSORD ON INERT MATERIAL. WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—9— SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				
WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—9—— SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	MOI DETERMINE	,		
WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION—9—— SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				
FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION S SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS	ABSORB ON INE	RT MATERIAL.	•	
FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. SECTION S SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				
SECTION SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS				
STORAGE AND HANDLING CONDITIONS	FOLLOW FEDERA	L. STATE AND LOCAL REGULATIONS.		
STORAGE AND HANDLING CONDITIONS		·		

....

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)
NO ADDITIONAL PRECAUTIONS AND LABELS



Sun Refining and Marketing Company THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM

SUN CODE

PRINTED: 85/11/30 SECTION 1 IDENTIFICATION		PRINTED FO	OR YOU FOR THIS PRO	S THE FIRST FORM	RD000014290
IAME SUNVIS 916 (32)	SYNONYMS PET ROLEUM	BASED LUBRICATI	NG OIL		REV. DATE 11/18/85
	AC NAME	ATION - MIXTURE			
UNIVERSAL CONTAI STEEL DRUM CORPO 2ND & PRICE STRE TRAINER	NER RATION	CHEMICA SUN F TEN P	ATION SUPPLIED BY	ARKET STREET 19103 Anson	
SECTION 2 LINGREDIENTS MATERIAL(S) SEVERELY SOLVENT REFINED PARACRESOL CAS # 128-37-J COPOLYMER; TRACE SILICONE	HEAVY PARAFFINIC (MIXED ALKYLATED POLYMER.	DISTILLATE (PETRO DIPHENYLAMINES;			YL RYLATE
SECTION 3 PHYSICAL DATA					
BOILING POINT: 780 mm Hg WIDE RANG	E °F. WIDE RANGE °C		Hg AT 20°C) NI: UR = 1) 12+ VOL.) NI:	ph Information:ph N/A OCTANOL/WATER PARTITION COEFFICIENT: N	
PECIFIC GRAVITY: (H;0=1) C.86 PACKING DENSITY: (WHEN APPLICABLE) Kg/m ³ N/A	<u> </u>	% VOLATILES BY VOL.: EVAPORATION RATE: (ETHYL ETHER = 1)	NIL 1000 X SLOWER	APPEARANCE LIGHT A AND ODOR: LITTLE ODOR THRESHOLD (ppm)	ODOR.
SECTION 4 FIRE AND EXPLOSION DA	ITA (CONT. ON PAGE 2)				
FLASH POINT: 390 NINIMUM COC	of 198 MINIMUM COC	_ °C. AUTOIGNITION TEMPERA	ATURE: 685 ESTIMATED	°F. 363 ESTIMATE	 °C.
NFPA CLASSIFICATIO	ON	HAZARD RATING	FL	AMMABLE LIMITS IN AIR	
HEALTH 0 FIRE 1 REA	CTIVITY MO	LEAST SLIGHT 0 1 DERATE HIGH EXTREME 2 3 4	LOWER EXPLOSIVE LEVEL (LEL) _ UPPER EXPLOSIVE LEVEL (UEL) _		% vo
FIRE AND EXPLOSION HAZARDS			-L		
CAN BE MADE TO BURN (FLAS	H POINT GREATER TO			-	SUN CODE R00000142900

MATERIAL SAFETY DATA SHEET	PAGE 2	SUN COD
EXTINGUISHING MEDIA	SPECIAL FIRE FIGHTING INSTRUCTIONS	000001629
ATER FOG. CHEMICAL FOAM. DRY CHEMICAL POWDER.	WEAR SELF-CONTAINED BREATHING APPARAT FIGHTING IN CONFINED SPACE.	US WHEN FIRE
SECTION 5 HEALTH HAZARD INFORMATION		
EXPOSURE LIMITS		
HR. TIME WEIGHTED PERMISSIBLE EXPOSURE 5.0 Mg/M3 .	. SUN RECOMMENDATION.	
ROUTES OF EXPOSURE AND EFFECTS		
MALATION NO ACUTE EFFECTS EXPECTED TO TWICE EXPOSURE	LIMIT.	
<u> </u>		•
KIN PRACTICALLY NON-TOXIC IF ABSORBED (LD5) GREATER EPEATED CONTACT.	THAN 2000 MG/KG). MINIMAL TRRITATION WITH	DOM ONCED OF
EPEATED CONTACT.	TOTAL MANUAL TREET AND WITH	PROLUMBED ON
·		
VE CONTACT WITH THE EVE MAY CAUSE MINIMAL IRRITATIO	ON.	
NGESTION PRACTICALLY NON-TOXIC (LDSU > 156/KG).		
FIRST AID HALATION NONE NORMALLY REQUIRED.		
MONE NORMACE! RESULTED.		
KIN WASH WITH SOAP AND WATER UNTIL NO ODOR REVAINS.	•	
KIN WASH WITH SOAP AND WATER UNTIL NO ODOR RETAINS.	•	
·	•	
·	,	
VE FLUSH WITH WATER.		
·		

INCOMPATIBLE MATERIALS

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS
CARBON MONOXIDE AND ASPHYXIANTS

SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)
STABILITY

TABLE.

PAGE 3

SUN CODE

RODOOO14290

POLYMERIZATION

POLYMERIZATION WILL NOT OCCUR.

SECTION 7 PROTECTION INFORMATION

VENTILATION
VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT.

PERSONAL PROTECTIVE EQUIPMENT

EVE PRODUCT MINIMALLY IRRITATING TO EYES. LOCAL SAFETY POLICY DECISION.

GLOVES PRODUCT MINIMALLY IRRITATING TO SKIN. LOCAL SAFETY POLICY DECISION.

RESPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION.
RESPIRATORY PROTECTION USUALLY NOT NEEDED UNLESS PRODUCT IS HEATED OR MISTED.

OTHER IF CONTACT IS UNAVOIDABLE, JEAR IMPERVIOUS PROTECTIVE GEAR. LAUN) ER SOILED CLOTHES.

SECTION 8 DISPOSAL PROCEDURES

AQUATIC TOXICITY

NOT DETERMINED

SPILL, LEAK OR RELEASE

CONTAIN SPILL. ADVISE EPA; STATE AGENCY IF REQUIRED. ABSORB ON INERT MATERIAL.

WASTE DISPOSAL

FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT FLUSH TO DRAIN/ STORM SEWER. INCINERATE UNDER CONTROLLED CONDITIONS. CONTRACT TO AUTHORIZED DISPOSAL SERVICE.

SECTION 9 SPECIAL PRECAUTIONS

STORAGE AND HANDLING CONDITIONS

NFPA CLASS III3 STORAGE. AVOID PROLONGED BREATHING OF MIST OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WASH THOROUGHLY AFTER HANDLING.

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)

MO ADDITIONAL PRECAUTIONS AND LABELS

SUN

Sun Refining and Marketing Company THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM

	ir e gul a ti	ONS. PLEASE FORWARD Y AND HEALTH. THIS	THIS TO YOUR MANAGER	SUN CODE
PRINTED: 85/11/30	PRINTED	FOR YOU FOR THIS PRO	DDUCT	000001430
SECTION 1 IDENTIFICATION				
NAME SUNVIS 921 (46)			REV.	DATE 12/17/81
CAS REGISTRY NO. CLASS	IFICATION - MIXTUR	1 E		
<u>-</u>	CHEN	MICAL FAMILY BLEN		
UNIVERSAL CONTAINER STEEL DRUM CORPORATION 2ND & PRICE STREET TRAINER PA 19313	T EA PHI	I REFINING AND MARKETING I PENN CENTER 1801 M	ARKET STREET A 19103	
SECTION 2 INGREDIENTS		(215) 29		
SOLVENT HEAVY REFINED PARAFFINIC DISTIL DIPHENYLAMINES; DITERTIARY BUTYL PARACIANHYDRIDE; AND SILICONE POLYMER. SECTION 3 PHYSICAL DATA	LLATE, CAS #6474186 RESOL; ZINC DITHIO	J4; METHACRYLATE POL' DIALKYL CARBAMATE;	YMER; MIXED ALKYLATED TETRAPHENYL SUCCINIC	,
BOILING POINT: 760 mm Hg WIDE RANGE °F. WIDE RANGI MELTING POINT: °F °F N/A SPECIFIC GRAVITY: (H ₂ O=1) 0.87 PACKING DENSITY: Kg/m ² N/A	VAPOR PRESSURE: (n VAPOR DENSITY: SOLUBILITY IN H,O: (% VOLATILES BY VOL.: EVAPORATION RATE: (ETHYL ETHER = 1)	MIL 1000 X S 9 HER	ph Information:ph N/A @ OCTANOL/WATER PARTITION COEFFICIENT: N.D. APPEARANCE LIGHT AMBE AND ODOR: LITTLE ODO ODOR THRESHOLD (ppm) N.D.	ER FLUID.
WHEN APPLICABLES	Verific Efficient = 17			
FLASH POINT: 410 MINIMUM COC of 213 MINIMUM			D .F. 368 ESTIMATED	°C.
NFPA CLASSIFICATION	HAZARD RATING		LAMMABLE LIMITS IN AIR	
HEALTH 0 FIRE 1 REACTIVITY 0	LEAST SLIGHT 0 1 MODERATE HIGH EXTREM 2 3 4	AF	NOT DETERMINED	%
FIRE AND EXPLOSION HAZARDS				
CAN BE MADE TO BURN (FLASH POINT GREAT	ER THAN 200F).		ROC	SUN COD

INCOMPATIBLE MATERIALS

STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS

CARBON MONOXIDE AND ASPHYKIANTS

SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)

STABLE.

STABILITY

SUN CODE

70 000014300

GLOVES PRODUCT MINIMALLY IRRITATING TO SKIN. LOCAL SAFETY POLICY DECISION.

EYE PRODUCT MINIMALLY IRRITATING TO EYES. LOCAL SAFETY POLICY DECISION.

RESPIRATOR RESPIRATORY PROTECTION USUALLY NOT NEEDED UNLESS PRODUCT IS HEATED OR MISTED.

OTHER NONE NORMALLY NEEDED.

PERSONAL PROTECTIVE EQUIPMENT

SECTION 8 DISPOSAL PROCEDURES AQUATIC TOXICITY

NOT DETERMINED

VENTILATION

SPILL, LEAK OR RELEASE ABSORB ON INERT MATERIAL.

WASTE DISPOSAL FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION 9 SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS NFPA CLASS III3 STORAGE.

SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE) NO ADDITIONAL PRECAUTIONS AND LABELS



SUN

Sun Refining and Marketing Company (Arco)

THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH'S THIS FORM REPLACES OUR

SUN CODE

PRINTED: 85/11/30 SECTION 1 IDENTIFICATION	PREVIOUS F	ORM DATED 19/37/85	DRM REPLACES OUR	R0 0000 1 53 7 55
NAME ART G331 SUPREME 104-40 SYNONYMS ENGIN	E OIL.			REV. DATE 11/25/85
1444 556,0564 14	IFICATION - MIXTURE			
ATLANTIC RICHFIELD COMPANY ATTENTION - MR. DAVID F. ENGEL P. O. BOX 353 BLDG. 8 NEJTOWN SQ. PA 19073	CHEMICAI S UN R T EN P PHILA	DELPHIA PA	RKET STREET	
L .	_J AND PH	ONE RAMONA P (215) 29	ANSON 3-632 T	
MATERIALIS) SEVERELY SOLVENT REFINED HEAVY PARAFFIN COPOLYMER CAS # 9010-79-1; ZINC DIALKYLD 61789-87-5; SODIUM SULFONATE CAS # 68608 ANMY DRIDE, PRODUCT TYPICALLY CONTAINS OF SECTION 3 PHYSICAL DATA BOILING POINT: 760 mm Hg WIDE RANGE OF WIDE RANGE	VAPOR PRESSURE: (mm F	LEUM) CASE 64741-8 68457-79-4; MAGNES TE; POLYBJTYLENEAM G7X MG; Q.J7X N; Q Ig AT 20°C NIL R = 1) 10+	8-4; ETHYLENE PRO IUM SULFONATE CAS IDE; POLYALKENYL 11% P: 0.12% ZIN ph information:ph 6.5	SUCCINIC
MELTING POINT: N/A	°C SOLUBILITY IN H,O: (% BY	VOL.) NT L ⁸	PARTITION COEFFICIENT:_N	l-D-
SPECIFIC GRAVITY: (H,O=1) Q.88 PACKING DENSITY: (WHEN APPLICABLE) Kg/m³ M/A	% VOLATILES BY VOL.: EVAPORATION RATE: (ETHYL ETHER = 1)	NIL 1000x Slower	APPEARANCE DARK FL AND ODOR: ENGINE ODOR THRESHOLD (ppm)	OIL ODOR
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)				
FLASH POINT: 400 TYPICAL COC .F. 204 TYPICAL	COC . AUTOIGNITION TEMPERA	TURE: 685 ESTIMATED	of 363 ESTIMATE	<u>·</u> • c.
NFPA CLASSIFICATION	HAZARD RATING	FL	AMMABLE LIMITS IN AIR	
HEALTH <u>G</u> FIRE <u>1</u> REACTIVITY <u>G</u> SPECIFIC HAZARD	LEAST SLIGHT 0 1 MODERATE HIGH EXTREME 2 3 4	LOWER EXPLOSIVE LEVEL (LEL)		% vo
CAN BE MADE TO BURN (FLASH POINT GREATE	ER THAN 200F).	·		SUN CODE RODO 0015 375 5

MATERIAL SAFETY DATA SHEET		PAGE 2		SUN COL
A EXTINGUISHING MEDIA NTER FOG. CHENICAL FOAN. DRY CHEI	TICAL DOVES	SPECIAL FIRE A	IGHTING INSTRUCTIONS	
ARBON DIOXIDE.	AICAL POSDER.	FIGHTING IN	NTAINED BREATHING APPARATU CONFINED SPACE.	IS WHEN FIRE
SECTION 5 HEALTH HAZARD INFORMATION EXPOSURE LIMITS				
HR. TIME WEIGHTED PERMISSIBLE EXP	POSURE 5.0 MG/M3	. SUN RECOMMENDAT	LON.	
ROUTES OF EXPOSURE AND EFFECTS HALATION NO ACUTE EFFECTS EXPECTED 1	TO TWICE EXPOSURE	TIMET		
		Cana 1.	·	
KIN PRACTICALLY NON-TOXIC IF ABSORE	AFD (IDSA CREATER	THAN 2000 MC (MC)		
EPEATED CONTACT.	olo (ED)O OKERIER	INAM ZUUU MG/KG)	- MILD IRRITATION WITH PRO	DLONGED OR
·				
·			,	
CONTACT WITH THE EYE HAY CAUSE	MILD TO MODERATE	IRRITATION.		· · · · · · · · · · · · · · · · · · ·
	•			٠.
GESTION PRACTICALLY NON-TOXIC (LDSC) > 156/KG).	· · · · · · · · · · · · · · · · · · ·		
FIRST AID HALATION MOVE PERSON TO FRESH AIR.				
· -				
IN WASH WITH SOAP AND WATER UNTIL	L NO ODOR REMAINS.	. WASH CLOTHING B	EFORE REUSE.	
KINSHIIVA				
E FLUSH WITH WATER FOR AT LEAST 1	IS MINUTES. IF IR	RITATION PERSISTS	. OBTAIN MEDICAL ASSISTANC	Ε.
GESTION GIVE LIQUIDS AND INDUCE VOMI MOUNTS WHICH ACCIDENTALLY ENTER M	ITING UNLESS VICTI	M IS UNCONSCIOUS	OBTAIN MEDICAL ASSISTANC	E. SMALL
	The state of the s	THE POST OF THE PERSON	ASTE OF IT IS GONE.	
SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)				
ABLE. STABILITY	INCOMP	ATIBLE MATERIALS	HAZARDOUS DECOMPOSI	TION PRODUCTS
	STRONG OXIDIZES	(5.	CARBON MONOXIDE AND	SPHYXIANTS.
				
se en		•	,	

SECTION TO PRECAUTIONARY LABEL (IF APPLICABLE)
CAUTION! PROLOTIGED OR REPEATED CONTACT WITH USED MOTOR OIL MAY BE HARMFUL TO SKIN AND COULD CAUSE SKIN
CANCER. PROMPTLY WASH AFFECTED AREA WITH SOAP AND WATER.

EUA

FFINIED: 85/07/20

Sun Refining and Marketing Company

(Arco)

THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS FORM REPLACES OUR PROVIDES FORM DATED 07/14/84

R SUN CO

DENTIFICATION	TLWEATOR?	FJKP DATED 07/14/84	300000164
NAME AR 10329 SUPREME 40 SYNONYMS			
CAS REGISTRY NO.			REV. DATE
NO CLA	SSIFICATION - MIXIURE		
ATLANTIC RICHFIELD COMPANY ATLANTIC - MR. LOHN GOLLAGIE	CHEMIC	AL FAMILY ALEND REFINING	
POULDX 53535 PAILABELPHIA PA 1914	TEN PEIL	AND MARKETING COMPANY PENN CENTER 1801 MARKET STREET ADELPHIA PA 19103	
i_	INFORM	ATION SUPPLIED BY	
SECTION 2 INGREDIENTS	AND PI	HONE RAMONA PANSON (215) 293-6321	
MATERIAL (S)			
SCLUENT NEFT IZZ HEAVY PARAFFINIC OIL (PREDUCT TYPICALLY CUNTATES 1142 ZINE SECTION 3 PHYSICAL DATA BOILING POINT: 780 mm Hg	VAPOR PRESSURE: (mm	Hg AT 20°C) CI CLL IR = 1)	FICIENT: A.D. MUER FLUID. ITTLE COOR
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)		ODOR THRESHOLI	O (ppm) A D
FLASH POINT: 445 MENTAUM COC .F. 227 MENTAUM	COC . C. AUTOIGNITION TEMPERA	TURE: 73(ESTIMATED .F. 388 ES	ILMATED •c.
NFPA CLASSIFICATION	HAZARD RATING	FLAMMABLE LIMITS IN	
SPECIFIC HAZARD	LEAST SLIGHT 0 1 MODERATE HIGH EXTREME	LOWER EXPLOSIVE LEVEL (LEL) NOT DETERM	INED%
FIRE AND EXPLOSION HAZARDS	2 3 4	UPPER EXPLOSIVE LEVEL (UEL) NOT CETER	INEC×
CAN BE MADE TO BURT (FLASH POINT >200F).		SUN COD F000 QC 164455

MATERIAL SAFETY DATA SHEE	T PAGE 2	SUN CO
EXTINGUISHING MEDIA		ROCCO16
WATER FOG. CHEMICAL FOAT. DRY CHEMICAL POWDE CARBO. DIOXIDE.	SPECIAL FIRE FIGHTING INSTRUCTIONS	
CARDON DIOXIDE.	R. WEAR SELF-CONTAINED BREATHING FIGHTING IN CONFINED SPACE.	APPARATUS WHEN FIRE
SECTION 5 HEALTH HAZARD INFORMATION		•
EXPOSURE LIMITS		
BHR. TIPE JEIGHTED PERMISSIBLE EXPOSURE 5.C	MG/M3.	
ROUTES OF EXPOSURE AND EFFECTS		
INHALATION NORE EXPECTED.		
L		·
SKIN PRACTICALLY NO I-TOXIC IF AUSURDED CLOSE G	REATER THAN 2 1 . MC IVC . HO SVEN TO THE	
	MATER THAN 2000 MOTEGS. NO SKIN EFFECTS	EXPECTED
	•	·
EVE CONTACT ALTH THE EYE ANY CAUSE PILO IRRIT	AT VIAN	
	riton.	
	·	
	·	
INGESTION PRACTICALLY NON-TUXIC (LDSC > 15G/KC)	·	
INGESTION PRACTICALLY NON-TOXIC (LDSC > 15G/KC)	·	
INGESTION PRACTICALLY NON-TUXIC (LDSC > 15G/KC)	·	
INGESTION PRACTICALLY NON-TOXIC (LDSC > 15G/KC) FIRST AID INHALATION NONE NORMALLY REQUIRED.	•	
INGESTION PRACTICALLY NON-TOXIC (LDSC > 15G/KC) FIRST AID INHALATION NONE NORMALLY REQUIRED.	•	
INGESTION PRACTICALLY NON-TUXIC (LDSC > 15G/KC)	•	
FIRST AID INHALATION NONE TORALLY RESULTED. SKIN LASH WITT SOAP AND WATER UNTIL NO ODOR R	•	
INGESTION PRACTICALLY NON-TOXIC (LDSC > 15G/KC) FIRST AID INHALATION NONE NORMALLY REQUIRED.	•	
FIRST AID INHALATION NONE TORALLY RESULTED. SKIN LASH WITT SOAP AND WATER UNTIL NO ODOR R	•	
FIRST AID INHALATION HONE MORALLY REQUIRED. SKIN LASH WITH WATER.	EM AINS.	
FIRST AID INHALATION HONE TORNALLY REQUIRED. SKIN LASH WITT SOAP AND WATER UNTIL NO ODOR R EVE FLUSH WITT WATER.	EM AINS.	ASSISTANCE CMAIL
FIRST AID INHALATION HONE TORNALLY REQUIRED. SKIN LASH WITT SOAP AND WATER UNTIL NO ODOR R EVE FLUSH WITT WATER.	EM AINS.	ASSISTANCE. SMALL
FIRST AID INHALATION HONE MORALLY REQUIRED. SKIN LASH WITH WATER.	EM AINS.	ASSISTANCE. SMALL
FIRST AID INHALATION NONE EDRAALLY REQUIRED. SKIN WASH WITH SOAP AND WATER UNTIL NO ODOR R EVE FLUSH WITH WATER. INGESTION GIVE LIQUIDS AND LIDUCE VOMITING UNLES APQUALS WATER ACCIDENTALLY ENTER MOUTH SHOUL	EM AINS.	ASSISTANCE. SMALL
FIRST AID INHALATION NONE MORALLY REQUIRED. SKIN WASH WITH SOAP AND WATER UNTIL NO ODOR R EVE FLUSH WITH WATER. INGESTION GIVE LIQUIDS AND LIDUCE VOMITING UNLES APQUALS WATER ACCIDENTALLY ENTER MOUTH SHOUL SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3)	EMAINS. S VICTIM IS UNCONSCIOUS. OBTAIN MEDICAL AD PER RINSED OUT UNTIL TASTE OF IT IS GONE	•
FIRST AID INHALATION NONE EDRALLY REQUIRED. SKIN WASH WITH SOAP AND WATER UNTIL NO ODOR R EVE FLUSH WITH WATER. INGESTION GIVE LIQUIDS AND LIDUCE VOMITING UNLES APQUALS WHICH ACCIDENTALLY ENTER MOUTH SHOUL SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3) STABILITY	EMAINS. S VICTIF IS UNCONSCIOUS. OBTAIN MEDICAL AD PERIODE OF IT IS GONE INCOMPATIBLE MATERIALS HAZARDOUS	S DECOMPOSITION PRODUCTS
FIRST AID INHALATION NONE EDRALLY REQUIRED. SKIN WASH WITH SOAP AND WATER UNTIL NO ODOR R EVE FLUSH WITH WATER. INGESTION GIVE LIQUIDS AND LIDUCE VOMITING UNLES APQUALS WHICH ACCIDENTALLY ENTER MOUTH SHOUL SECTION 6 REACTIVITY DATA (CONT. ON PAGE 3) STABILITY	EMAINS. S VICTIF IS UNCONSCIOUS. OBTAIN MEDICAL AD PERIODE OF IT IS GONE INCOMPATIBLE MATERIALS HAZARDOUS	•

MATERIAL SAFETY DATA SHEET	PAGE 3	SUN C
I S POLY ION		
PELYPERIZATION WILL NOT OCCUR.		
SECTION 7 PROTECTION INFORMATION VENTILATION		
VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIPIT.		
PERSONAL PROTECTIVE EQUIPMENT		
EVE SFLASH PROOF CHEMICAL GCGGLES	,	
GLOVES PRODUCT MINITALLY IRRITATING TO SKIN LOCAL SA	FETY POLICY DECISION	
·		
RESPIRATOR RESPIRATORY PROTECTION USUALLY NOT NEEDED U	NLESS PRODUCT IS HEATED OR MISTED.	
OTHER NONE NOR TALLY NEEDED.		
SECTION 8 DISPOSAL PROCEDURES	<u> </u>	
AQUATIC TOXICITY NC1 CETEAM INED		
SPILL LEAK OR RELEASE AESORI CA INIKT MATERIAL.		
The state of the s		
WASTE DISPOSAL		
FCLLCA FEDERAL, STATE AND LOCAL REGULATIONS.		
SECTION 9 SPECIAL PRECAUTIONS STORAGE AND HANDLING CONDITIONS		
NFPA CLASS III STORAGE.		
SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE)		
A CAULION! PROLONGED OR REPTAIRS CONTACT WITH HEED WA	OTOR CIL PAY EE HARMFUL TO SKIN ANI	D COULD CAUSE CYTE
CANCER. PROMPTLY WASH AFFECTED AREA WITH SOAP AN	ID JATER.	P COOLD CYOSE 2KIN
	·	

MATERIAL SAFETY DATA SHEET



Sun Refining and Marketing Company

(Arco)

THIS PRODUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS FORM REPLACES OUR PREVIOUS FORM NAMED TAXABLE OF SAFETY AND HEALTH.

SUN CODE

PRINTED: 85/11/30 SECTION 1 IDENTIFICATION	OF SAFE PREVIOU	TY AND HEALT1. THIS S FORM DATED 17/20/8	FORM REPLACES OUR ROOMS 1642
NAME AR 10328 SUPREME 33 SYNONYMS			REV. DATE 11/25/85
CAS REGISTRY NO. CLAS	SIFICATION - MIXTU	RF.	
Γ,	CHE	MICAL FAMILY BI END	
ATLANTIC RICHFIELD COMPANY ATTENTION - MR. DAVID F. ENGER P. O. BOX 353 BLDG. 8 ENTOWN SQ. PA 19073	 TE	V REFINING AND MARKETING I PENN CENTER 1801 M	COMPANY ARKET STREET A 19103
		A N CHA R	· · · · · · · · · · · · · · · · · · ·
SECTION 2 INGREDIENTS MATERIALIS)			
SEVERELY SOLVENT REFINED HEAVY PARAFFII PHOSPHATE CASI 68457-79-4; MAGNESIUM SI PHENATE; POLYBUTYLENEAMIDE; POLYALKENY CONTAINS 0.38% CALCIUM; J. 11% MAGNESIUM SEGUION 3 PHYSICAL DATA	NIC DISTILLATE (PEULFONATE CAS# 61780 JLFONATE CAS# 61780 SUCCINIC ANHYDRII JJJ72 NITROGEN;	TROLEUM) CASU 64741- D-87-5; SODIUM SULFO DE; METHACRYLATE COP D-12% PHOSP1DRUS; D	88-4; ZINC DIALKYL DITHIO NATE CAS# 68608-26-4; CALCIUM OLYMER PRODUCT TYPICALLY
BOILING POINT: 760 mm Hg HIGH WITH OF WIDE RANGI	VAPOR PRESSURE: {n	MM Hg AT 20°C) <0.3001 (AIR = 1) 10+	pH_INFORMATION:pH75@g/I_H
SPECIFIC GRAVITY: (H,O=1) G-88		-	PARTITION COEFFICIENT: N.D.
BACKING DELICITY.	% VOLATILES BY VOL.: EVAPORATION RATE:	NIL	APPEARANCE AMBER FLUID
(WHEN APPLICABLE) Kg/m3 M/A	(ETHYL ETHER = 1)	1000X SLOWER	AND ODOR: LITTLE ODOR ODOR THRESHOLD (ppm) N.D.
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)			
FLASH POINT: 425 MINIMUM COC of 219 MINIMUM	COC .C. AUTOIGNITION TEM	PERATURE: 725 ESTIVATE	D°F. 385_ESTIMATED°C.
NFPA CLASSIFICATION	HAZARD RATING	F	LAMMABLE LIMITS IN AIR
HEALTH 0 FIRE 1 REACTIVITY 0	LEAST SLIGHT 0 1		NOT DETERMINED % v
SPECIFIC HAZARD	MODERATE HIGH EXTREM 2 3 4	E "UPPER EXPLOSIVE LEVEL (UEL)	NOT DETERMINED % v
FIRE AND EXPLOSION HAZARDS	· · · · · · · · · · · · · · · · · · ·		
CAN BE MADE TO BURN (FLASH POINT GREATE	R THAN 200F).		SUN CODE

PiGNAL Red)	MATERIAL SAFETY DATA SHEET	PAGE 2	SUN COI
I EXTINGUISHING MEDIA	— (/ - / - /	SPECIAL FIRE FIGHTING INSTRUCTIONS	
CARBON DIOXIDE.	L FOAM. DRY CHEMICAL POWDER.	WEAR SELF-CONTAINED BREATHING APP FIGHTING IN CONFINED SPACE.	PARATUS WHEN FIRE
SECTION 5 HEALTH HAZ	ARD INFORMATION		
	PERMISSIBLE EXPOSURE 5.0 MG/M3 .	. SUN RECONMENDATION.	
ROUTES OF EXPOSURE A	ND EFFECTS FECTS EXPECTED TO TWICE EXPOSURE	17M77	
	The state of the s	L1711	
SKIN PRACTICALLY NON	-TOXIC IF ABSORBED (LDSO GREATER	THAN 2000 MG/KG). MILD IRRITATION WIT	
REPEATED CONTACT.	THE STATE OF THE REPORT OF THE	THE LOUD MOTEON ATED TENTE ON ALL	H PROLONGED OR
EVE CONTACT WITH THE	EVE HAY CAUSE WILD IRRIVATION.		**
	THE THE TRANSPORT OF THE TRANSPORT		
	· · · · · · · · · · · · · · · · · · ·		
	NON-YOURC (LDSC > 15G/KG).		
INGESTION PRACTICALLY	· · · · · · · · · · · · · · · · · · ·		
INGESTION PRACTICALLY FIRST AID	NON-YOXIC (LDSG > 15G/KG).		
INGESTION PRACTICALLY FIRST AID INHALATION NONE NORMAL	NON-YOXIC (LDSG > 15G/KG).	MASH CLOTHING DELOGE DELICE	
INGESTION PRACTICALLY FIRST AID INHALATION NONE NORMAL	NON-YOXIC (LDSG > 15G/KG).	. WASH CLOTHING BEFORE REUSE.	
FIRST AID INHALATION NONE NORMAL	NON-YOXIC (LDSG > 15G/KG). LY REQUIRED. AND WATER UNTIL NO ODOR REMAINS.		
FIRST AID INHALATION NONE NORMAL	NON-YOXIC (LDSG > 15G/KG).		
FIRST AID INHALATION NONE NORMAL SKIN WASH WITH SOAP EYE FLUSH WITH JATES	NON-YUXIC (LDSU > 15G/KG). LY REQUIRED. AND WATER UNTIL NO ODOR REMAINS. 1. IF IRRITATION PERSISTS. OBTAIN	N MEDICAL ASSISTANCE.	
FIRST AID INHALATION NONE NORMAL SKIN WASH WITH SOAP EYE FLUSH WITH JATES	NON-YUXIC (LDSU > 15G/KG). LY REQUIRED. AND WATER UNTIL NO ODOR REMAINS. 1. IF IRRITATION PERSISTS. OBTAIN		STANCE. SMALL
FIRST AID INHALATION NONE NORMAL SKIN WASH WITH SOAP EYE FLUSH WITH JATES INGESTION GIVE LIBITOS AMOUNTS WHICH ACCIS	NON-YOXIC (LDSG > YSG/KG). LY REQUIRED. AND WATER UNTIL NO ODOR REMAINS. 1. IF IRRITATION PERSISTS. OBTAIN AND INDUCE VOMITING UNLESS VICTION OF THE PROPERTY OF THE PROPE	N MEDICAL ASSISTANCE.	STANCE. SMALL
FIRST AID INHALATION NONE NORMAL SKIN WASH WITH SOAP EYE FLUSH WITH JATES INGESTION GIVE LIGHTS AMOUNTS WHICH ACCIS	NOW-YUXIC (LDSU > 15G/KG). LY REQUIRED. AND WATER UNTIL NO ODOR REMAINS. 1. IF IRRITATION PERSISTS. OBTAIN AND INDUCE VOMITING UNLESS VICTION AND INDUCE VOMITING UNLESS VICTION AND INDUCE WOUTH SHOULD BE RICHARD CONT. ON PAGE 31	N MEDICAL ASSISTANCE. IM IS UNCONSCIOUS. OBTAIN MEDICAL ASSI INSED OUT UNTIL TASTE OF IT IS GONE.	
FIRST AID INHALATION NONE NORMAL SKIN WASH WITH SOAP EYE FLUSH WITH JATES INGESTION GIVE LIBITOS AMOUNTS WHICH ACCIS	NOW-YUXIC (LDSU > 15G/KG). LY REQUIRED. AND WATER UNTIL NO ODOR REMAINS. 1. IF IRRITATION PERSISTS. OBTAIN AND INDUCE VOMITING UNLESS VICTION AND INDUCE VOMITING UNLESS VICTION AND INDUCE WOUTH SHOULD BE RICHARD CONT. ON PAGE 31	M IS UNCONSCIOUS. OBTAIN MEDICAL ASSI	OMPOSITION PRODUCTS

•

PAGE 3

SUN CODE

-1 doon 1642

POLYMERIZATION WILL NOT OCCUR.

SECTION 7 PROTECTION INFORMATION

VENTILATION
VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT.

PERSONAL PROTECTIVE EQUIPMENT

EVE SPLASH PROOF CHEMICAL GOGGLES

GLOVES IMPERVIOUS GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED.

RESPIRATOR CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIDSH CERTIFIED RESPIRATORY PROTECTION. RESPIRATORY PROTECTION USUALLY NOT NEEDED UNLESS PRODUCT IS HEATED OR MISTED.

OTHER IF CONTACT IS UNAVOIDABLE, JEAR IMPERVIOUS PROTECTIVE GEAR. LAUNDER SOILED CLOTHES.

SECTION 8 DISPOSAL PROCEDURES - AQUATIC TOXICITY

NOT DETERMINED

٠, ٠, ٠

SPILL, LEAK OR RELEASE

CONTAIN SPILL. ABSORB ON INERT MATERIAL.

WASTE DISPOSAL
FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT FLUSH TO DRAIN/ STORM SEWER. CONTRACT TO AUTHORIZED DISPOSAL SERVICE.

SECTION 9 SPECIAL PRECAUTIONS
STORAGE AND HANDLING CONDITIONS

NFPA CLASS III STORAGE. AVOID PROLONGED BREATHING OF MIST OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WASH THOROUGHLY AFTER HANDLING.

SECTION TO PRECAUTIONARY LABEL (IF APPLICABLE)
CAUTION! PROLONGED OR REPEATED CONTACT WITH USED MOTOR OIL MAY BE TARMFUL TO SKIN AND COULD CAUSE SKIN
CANCER. PROMPTLY WASH AFFECTED AREA WITH SDAP AND WATER.

MATERIAL SAFETY DATA SHEET



Sun Refining and Marketing Company



THIS ADDUCT SAFETY INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS FORM REPLACES OUR PREVIOUS FORM DATED 10/26/85

1400

SUN CODE

PRINTED: 85/12/07 SECTION 1 IDENTIFICATION		PREVIOUS F	AND HEALTH. THIS I	ORM REPLACES OUR	R000001641
NAME ARLO327 SUPREME 20M-20 SYNONYMS			· · · · · · · · · · · · · · · · · · ·		REV. DATE
CAS REGISTRY NO. CAS NAME					11/22/85
- AU LLA	ZZIETCVIIO	N - MIXTURE			
ATLANTIC DICHERS & CONT.	٦	CHEMICA	L FAMILY BLEND		
ATLANTIC RICHFIELD COMPANY ATTENTION - MR. DAVID F. ENG	- -	SUN R	EFINING		
l re ue bux 151 Ring, g	tL	TEN O	AND MARKETING	COHPANY	
NEWTOWN SQ. PA 1907	3	PHTIA	ENN CENTER 1801 MA	RKET STREET	
	1		ATION SUPPLIED BY	19103	
		AND PH	ONE RAMDNA F	PANSON	
SECTION 2 INGREDIENTS MATERIALIS)			[215] 29	13-6323	
SEVERELY SOLVENT REFINED HEAVY PARAFF PHOSPHATE CAS# 68457-79-4; MAGNESIUM PHENATE; POLYBUTYLENEAMIDE; POLYALKEN ONTAINS OLDAX CALCIUM: DLIZ MAGNESI SECTION 3 PHYSICAL DATA BOILING POINT: 780 mm Hg HIGH WITH °F WIDE RAN MELTING POINT: M/A °F M/A SPECIFIC GRAVITY: (H;0-1) OLBB	GE °C VAPO	OR PRESSURE: (mm)	Ig AT 20°C)	_ ph information:ph OCTANOL/WATER _ PARTITION COEFFICIENT:_	5
PACKING DENSITY: - (WHEN APPLICABLE) Kg/m³ M/A	EVAP	ORATION RATE:	- NIL	APPEARANCE AMBER AND ODOR: LITTLE	
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)			LOOOX SLOWER	ODOR THRESHOLD (ppm)	-NoDo
FLASH POINT: 400 NINIMUM COC .F.204 NINIMU	M COC °C.	AUTOIGNITION TEMPERA	TURE: 670 ESTIMATED	*F.354_ESTIMAT	ED• c.
NFPA CLASSIFICATION	HAZA	RD RATING	FL	AMMABLE LIMITS IN AIR	
HEALTH 0 FIRE 1 REACTIVITY 0	LEAST 0	SLIGHT 1	LOWER EXPLOSIVE LEVEL (LEL)		% \
SPECIFIC HAZARD	MODERATE 2	HIGH EXTREME	UPPER EXPLOSIVE LEVEL (UEL)	· -	
FIRE AND EXPLOSION HAZARDS	_ <u></u>				% \
CAN BE MADE TO BURN (FLASH POINT GREAT	TER THAN 2	00F).			SUN CODE R00000164155

MATERIAL SAFETY DATA SHEET

ပ္သံု့ မွ	-
	we w
5	
	FBB.

Sun Refining and Marketing Company



PRINTED: 85/05/11 SECTION 1 IDENTIFICATION	OF SAFÉ PREVIOU	TY AND HEALTH. THIS S FORM DATED 01/26/	FORM REPLACES OUR 83 RO00003728
NAME AR 10224 FL S3 PLUS 10TBN SYNONYMS		3/40	
	SSIFICATION - MIXTU	D 6	REV. DATE / 23/83
ATLANTIC RICHFIELD COMPANY ATTENTION - MR.JOHN GALLAGHE P O BOX 60585 PHILADELPHIA PA 1914	Сн. STU 5 5	EMICAL FAMILY BLEND N REFINING AND MARKETIN N PENN CENTER 1801	MARKET STREET
SECTION 2 INGREDIENTS		D PHONE (215)	293-6323
SOLVENT REFINED HEAVY PARAFFUNIC DIL CALCIUM, MAGNESIUM, ZINC AND NITROGEN SECTION 3 PHYSICAL DATA SOILING POINT: 780 mm Hg HIGH WITH .F. JIDE RAN MELTING POINT: N/A .F. SMECIFIC GRAVITY: (H.O=1) U.88		mm Hg AT 20°C) V[] (AIR = 1) 12 P	D. 124 PHOSPHORUS. ph information:ph 7.0 6 9/1 H OCTANOL/WATER PARTITION COEFFICIENT: N.D.
PACKING DENSITY: (WHEN APPLICABLE) Kg/m	EVAPORATION RATE: (ETHYL ETHER = 1)	1000x 5. OWER	APPEARANCE DARK FLUID. AND ODOR: ENGINE OIL ODOR. ODOR THRESHOLD (ppm) N.D.
SECTION 4 FIRE AND EXPLOSION DATA ICONT. ON PAGE 2)			
FLASH POINT: 430 HENEMUM COC .F. 221 MINIMU	M CUC .C. AUTOIGNITION TEN	PERATURE: 725 ESTIMAT	ED •F. 385 ESTIMATED •C.
NFPA CLASSIFICATION	HAZARD RATING		FLAMMABLE LIMITS IN AIR
HEALTH U FIRE 1 REACTIVITY () SPECIFIC HAZARD	LEAST SLIGHT 0 1 MODERATE HIGH EXTRE 2 3 4	ME	NOT DETERMINED % \
FIRE AND EXPLOSION HAZARDS			
OOS THIOG HEALT) KNUB CI BURN LE NAD	F).		ROOO 0037 2 8 5 5

<u> </u>	MATERIAL SAFETY DATA SHEET	PAGE 2	SUN C
. FXTINGING MEDIA	UAM. DRY CHEMICAL POWDER.	SPECIAL FIRE FIGHTING INSTRUCTIONS WEAR SELF-COVIATINED BREATHING APPARA	100000 37
		FIGHTING IN : ON FINE D SPACE.	THE TERE
SECTION 5 HEALTH HAZARD EXPOSURE LIMITS			
SHK. TIME WEIGHTED PE	WMISSIBLE EXPOSURE 5.0 MG/M3 .		
ROUTES OF EXPOSURE AND NHALATION NU ACTIE EFFEC	EFFECTS TO TWICE EXPOSURE		
KINNILD TRRITATION WI	TH PROLONGED OR REPEATED CONTA	cr.	
			•
		•	•
VE CONTACT JITH THE E	YE MAY CAUSE WILD IRRITATION.	NO DEUTENI NE REGER	
		NO PERMANENT DAMAGE EXPECTED.	
HEESTION SETTINET TOXIC	(EDSO 5 10 15 6/KG).		
·			:
FIRST AID HOVE PERSON TO	N - D - VI - N - I		<u>.</u>
	D WATER UNITE NO ODOR REMAINS.		· · · · · · · · · · · · · · · · · · ·
	STATE OF THE REALIST.	MASH CLUTHING BEFORE REUSE.	
VE FLUSH WITT AATER.			
(°	•		
AGESTION SIVE LIQUIDS AND	THOUGH VONITING UNLESS VICTO	T IS UNCONSCIOUS. UBTAIN MEDICAL ASSISTAN	***
MOORIS MUTCH ACCIDEN	TALLY ENTER MOUTH SHOULD BE RI	NSED OUT UNTIL TASTE OF IT IS GONE.	NCE. SMALL
SECTION 6 REACTIVITY DATA			
TAJLE. STABILITY		TIBLE MATERIALS HAZARDOUS DECOMPO	SITION PRODUCTS
	NEONALINE MI INCOMPALIACIÓN INCOMPATIBLE MI INCOMPATIBLE MI	CARBON MONOXIDE XND	ASPHYXIANTS
アンデアント (Amaging Amaging Tree Control of the Con-	Take the second		



Sun Refining and Marketing Company



SECTION 1 IDENTIFICATION	OF SAFE	TY AND HEALT 4 THIS S FORM DATE) 10/27	FORM REPLACES OUR	UN CODE
AR10036 ICE MACHINE 350 SYNONYMS	II DEVISOR	2 TOKH DAIES 10/27/	783 RO 0000	<u> </u>
S REGISTRY NO.	· · · · · · · · · · · · · · · · · · ·		REV. DATE	
NO CLAS	SIFICATION - MIXTUR		REV. DATE	73/85
ATLANTIC RICHFIELD COMPANY ATTENTION - 4R. JOHN GALLAGHER P 0 BOK 60585 PHI_ADELPHIA PA 19145	TEN PHI	AICAL FAMILY BLEVDED PET V REFINING AND JARKETIN V PENN CENTER 1801 (LADELPHIA		
SECTION 2 INGREDIENTS TERIAL(S)	AND	PHONE RAMONA	PANSON 293-6323	
FINED PARAFFINIC DILS PLUS POUR DEPR	ESSANT AND DEFOAMER	ADDITIVES		
SECTION 3 PHYSICAL DATA		·		
LING POINT: 760 mm Hg HIGH ATTH of SIDE RANG TING POINT: N/A OF: CIFIC GRAVITY: (H,O=1) KING DENSITY: HEN APPLICABLE) KO/m³ N/A ECTION=4 FIRE AND EXPLOSION DATA (CONT ON PAGE 2)	SOLUBILITY IN H,O: (% B % VOLATILES BY VOL.: EVAPORATION RATE: (ETHYL ETHER = 1)	NIL 1000X SLOWER	OCTANOL/WATER PARTITION COEFFICIENT: N. D. APPEARANCE LITTLE ODOR ODOR THRESHOLD (ppm) N. D.	_ g/I H₂O
SH POINT: 425 MINIMUM COC OF 213 MINIMUM NFPA CLASSIFICATION	COC °C. AUTOIGNITION TEMPER		ED .F. 371 ESTIMATED .C.	
LTH G FIRE 1 REACTIVITY 0	LEAST SLIGHT	,	FLAMMABLE LIMITS IN AIR	
SIFIC HAZARD	MODERATE HIGH EXTREME	LOWER EXPLOSIVE LEVEL (LEL)		% VOL
FIRE AND EXPLOSION HAZARDS	2 3 4	UPPER EXPLOSIVE LEVEL (UEL)	NOT DETERMINED	% VOL
N BE MADE TO BURN (FLASH POINT >200F)	•		R00000371	CODE 1255

CARBON MONOXIDE AND ASPHYXIANYS

STRONG OXIDIZERS.



THIS PRODUCT SAFFTY INFORMATION IS PROW DED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPITANCE WITH HEALTH/SAFFTY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFFTY AND HEALTH. THIS FORM REPLACES OUR PREVIOUS FORM DATED 06/29/84 RO000001 05

SUN CO

R000d010645

SYNONYMS			REV. DATE
CAS REGISTRY NO 6762-34-3 CAS NAME CHEMIC	ALLY NEUTRALIZED HEAV	Y NAPHTHENIC DISTIL	
ATLANTIC RICHFIELD COMPANY	CHEMIC	AL FAMILY PETROLEUM OTI	
ATTENTION - MR. DAVID F. FNG. P. O. BOX 353 GLDG. 8 NEUTOWN SQ. PA 1907	EI TFN	AND MARKETING PENN CENTER 1801 MA	CAMPANY
L	INFORM AND P	HATION SUPPLIED BY JONATHAN (215) 29	M. HAAS
SECTION 2 INGREDIENTS MATERIAL(S)			2 11761
A COMPLEY COMPINATION OF HYDRIK ARRINS CONSISTS OF HYDROCARRONS HAVING CARRON A FINISHED OIL WITH A VISCOSITY OF AT SECTION 3 PHYSICAL DATA	VAPOR PRESSURE: (mm	Hg AT 20°C; <u> </u>	pH INFORMATION: pH N/A @
BOILING POINT: 780 mm Hg WIDE RANGE OF WIDE RANG	C VAPOR DENSITY:	AIR = 1) 12+	OCTANOL/WATER PARTITION COEFFICIENT: No Do
SPECIFIC GRAVITY: (H,O=1) 0-93	% VOLATILES BY VOL.:	NIL	APPEARANCE CIFAR. AMBER FIT
PACKING DENSITY: (WHEN APPLICABLE) Kg/m' A	EVAPORATION RATE: (ETHYL ETHER = 1)	1000 X SLOWER	AND ODOR: LITTE HINTER ODOR THRESHOLD (ppm) N.D.
SECTION 4 FIRE AND EXPLOSION DATA (CONT. ON PAGE 2)			
FLASH POINT: 360 MINTMUM COC .F. 183 MINTMU	M COC . AUTOIGNITION TEMPER	ATURE: 695 FST MATEN	•F. 368 FS'THATED •C.
NFPA CLASSIFICATION	HAZARD RATING	FL	AMMABLE LIMITS IN AIR
HEALTH O FIRE B REACTIVITY O	LEAST SLIGHT 0 1	LOWER EXPLOSIVE LEVEL (LEL)	NOT DETERMINED
SPECIFIC HAZARD	MODERATE HIGH EXTREME	UPPER EXPLOSIVE LEVEL (UEL)	NOT DETER MENED
FIRE AND EXPLOSION HAZARDS			
TAN RE MANE TO BURN LELASH POINT GREAT	FR THAN 200FA		SUN POO OGO 1 OS

	MATERIAL SAFETY DATA SHEET	PAGE 2	SUN COD
EXTINGUISHING MEDI		SPECIAL FIRE FIGHTING INSTRUCTIONS	-301000ht
TATER FOR. CHENT CARRON DIOXIDE.	CAL FOAM. DRY CHEMICAL POWNER.	WEAR SELE-CONTAINED BREATHING APPLA FIGHTING IN CONFINED SPACE.	ATUS WHEN FYRE
SECTION 5 HEALTH P	IAZARD INFORMATION		
EXPOSURE LIMITS	FO PERMISSIBLE EXPOSURE 0-2 HEAM'S		· · · · · · · · · · · · · · · · · · ·
ROUTES OF EXPOSUR	E AND EFFECTS		
HALATION EXCESSIVE	EXPOSURES MAY CAUSE DISCONFORT.	DYSAGREFARIE DOUR. NAUSEA.	
	•		•
VA. B. I. V. V. L. L. V. V. L. V.			•
MALLANGED AND DE	PEATER CONTACT WILD TRATE	R THAN 2000 MG/KGT. HAY PRODUCE SKIN TURD TTH PROLONGED AND REPEATED CONTACT. DRAIT	KS UTTH
RRITATION SCORE	IS: 1-66 OUT OF 8-0	ITH PROLONGED AND REPEATED CONTACT. DRAIT	ESKIN
	•		
			•
0-4 0-0 0-	0 0-0 nut of 110-0 at 1	TNG. NO PERHANENT DANAGE EXPECTED. TRRTEA. 6 24 48 72 (HOURS)	TION SCORE 0.8
NGESTION PRACTICAL	I V NON-TOYIC II 050 5 1567KET.		
Idealion 1	Then with the part of the party		
FIRST AID	ALL WERENESS		
HALATION NONE NOW	Marra Wednibeo-		
HOES-	AFART MATER HATTE NIT HARR REMAIN	S. WASH CUTTING HEFORE REUSE. DESTROY CO	NTAHTNATED
•			
E FITTER WITH UA	TER-		
•			
ACCETION GIVE I TOTAL	IS ANN TAINING WAS AND THE		:
MAINTS WHICH AC	TOPNIALLA ENTES MULTH CHAIR & VE	TIM IS UNCHNICIOUS. OBTAIN HEDICAL ASSISTA	ANTE. SMALL
	Security Pults make Supply 90	RIPSEV DUE UNTIL TASTE DE TE ES GONE.	·
S. C.			•
SECTION 6 REACTIVITY			
TAREF _ ST	ABILITY	MPATIBLE MATERIALS HAZARDOUS DECOMP	POSITION PRODUCTS
	STRONG UXTUTT	FRS. CARHIN MINUXINE AN	IT ACDLY YT ANTC

SPILL LEAK OF RELEASE
ONTATH SPYLL. ARSORA ON THERY MATERIAL.

ENLLOW FENERAL. STATE AND LOCAL REGINATIONS. NOT A RERA HAZARDINUS WASTE IF UNCONTRACTED INCOMERATE.

SECTION 9 SPECIAL PRECAUTIONS
STORAGE AND HANDLING CONDITIONS

MEPA CLASS TITE STOPAGE. AUNTO PROLONGED REFATHING OF MIST OR VAPOR. AUDID CONTACT WITH THIS HATERIAL.

SECTION TO PRECAUTIONARY LABEL (IF APPLICABLE)

WARNING I CONTAINS UNTREATED NAPHTHENIC OIL WHICH IS CLASSIFIED AS CARCINGENIC BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER. UNTREATED NAPHTHENIC OILS HAVE PRODUCED SKIN CANCER IN LARORATOR'S ANIMAL FYPER THENTS. HINTHITE SKIN CONTACT AND TOWARD ATTOM OF MIST. THE CONTACT IS UNAVOIDABLE. WEAR APPROPRIATE THROUGH WITH THIS OIL SHOULD BE REMOVED AND LAUNDERED BEFORE REUSE. AVERAGE EXPOSURE TO TREORNE MIST FOR AN REMOVED SHOULD NOT EXCEED U.2 HILL IGRAMS PER CUBIC METER OF AIR.

MATERIAL SAFETY DATA SHEET

PRINTED: 85/05/11

Sun Refining and Marketing Company

THIS PRODUCT SAFET! INFORMATION IS PROVIDED PERIODICALLY TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH/SAFETY/ENVIRONMENTAL REGULATIONS. PLEASE FORWARD THIS TO YOUR MANAGER OF SAFETY AND HEALTH. THIS IS THE FIRST FORM PRINTED FOR YOU FOR THIS PRODUCT ROOM PUDDUUSSYUU

SUN CODE

DESCRIPTION TO THE TOP OF THE PROPERTY OF THE			130	- KOOPOOO 3 34 00
MAME SN 150 BS SYNONYMS				REV. DATE
CAS REGISTRY N8.47+1384 CAS NAME SOLVENT	REFINED HEAVY PARAF	F7.417.6 A.C.O.T.A.A.C.O.T.		REV. DAT /15/83
ATLANTIC RICHFIELD COMPANY ATTENTION - MR.JOHN GALLAGHER P 0 30X 60585 PHILADELPHIA PA 19145	TEN PHIL	AL FAMILY PETROLEUM HYDI REFINING AND GARKETING O PENN CENTER 1801 MAR AD ELPHIA PA MATION SUPPLIED BY HOME	COMPANY IKET STREET 19103	
SECTION 2 INGREDIENTS			1-6323	
SOLVENT REFINED, HYDROTREATED HEAVY PAI	RAFFINIC DISTILLATE,	1 00%		
SECTION 3 PHYSICALIDAYA				
BOILING POINT: 760 mm Hg HEGFH WETH of JEDE RANGE MELTING POINT: N/A of of officers of the second o	SOLUBILITY IN H,O: (% BY % VOLATILES BY VOL: EVAPORATION RATE: (ETHYL ETHER = 1)	He AT 20°C) 3ELOW 0001 AIR = 1) 23 VOL) NEL 1000K SLOWER	PH INFORMATION: PH_N/A OCTANOL/WATER PARTITION COEFFICIENT: APPEARANCE DARK V AND ODOR: LITTLE ODOR THRESHOLD (ppm)	N.D. ISCOUS FLUID. ODOR
FLASH POINT: 570 MINIMUM COC .F. 297 MINIMUM	COC . AUTOIGNITION TEMPER	ATURE: 755 ESTIMATED	·r. 402 ESTINATI	ED •c.
NFPA CLASSIFICATION	HAZARD RATING		MMABLE LIMITS IN AIR	
HEALTH C FIRE 1 REACTIVITY 0 SPECIFIC HAZARD	LEAST SLIGHT 0 1 MODERATE HIGH EXTREME 2 3 4	LOWER EXPLOSIVE LEVEL (LEL)	NOT DETERMINED	
FIRE AND EXPLOSION HAZARDS		<u></u>		~ vot
CAN BE MADE TO BURN (FLASH POINT >200F)	•	·		R00000033400

MA.	TERIAL SAFETY DATA SHEET		PAGE 2	SUN CODE
MA 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	(ARCO)		• .	1000003340
WAYER FOG. CHEVICAL FOAT	N DOY CHENTEN PAUDED	SPECIAL FIRE FIGHTING	INSTRUCTIONS	
CARBON SIOXIDE.	as one chemical rousers	FIGHTING IN : ONFI	ED BREATHING APPARAT NED SPACE.	O2 MUEN LIKE
SECTION 5 HEALTH HAZARD INF	DRMATION			·
EXPOSURE LIMITS		· · · · · · · · · · · · · · · · · · ·		
DAK. IIME WEIGHTED PEKH	ISSIBLE EXPOSURE 5.0 MG/M3	•		
ROUTES OF EXPOSURE AND EFF	CTS TO TWICE EXPOSURE			
	EXPECTED TO THICK EXPOSORE	LINI I.	·	
19				
SKIN PRACTICALLY NON-TOXI	C IF AUSURBED (LDSU GREATER	THAN 2000 MG/KS). NO	SKIN EFFECTS EXPECTE	D
ľ				
	•			
	•			
FVE CONTACT WITH THE FVE	MAY CAUSE WILD IRRIVATION.			·
	in the three	•		
121 11		·		•
INGESTION PRACTICALLY NON-	TOXIC (LDSO > 15G/KG).		<u> </u>	
•				;
FIRST AID				
MALATION NONE NURMALLY R	EQUIRED.			
SKIN WASH WITH SUAP AND	WATER UNTIL NO ODOK REMAINS	. WASH CLOTHING BEFORE	REUSE.	
		•		
EVE FLUSH WITH WATER.			<u> </u>	
			·	•
1				
INGESTION SIVE LIQUIDS AND AMOUNTS WHICH ACCIDENTA	INDUCE VOMITING UNLESS VICT LLY ENTER MOUTH SHOULD BE R	IN IS UNCONSCIOUS. OBT	AIN HEDICAL ASSISTAN	CE. SMALL
	LET ENTER MOOTH SHOOLD BE R	THREE OUT ONLIE 1421E	OF IT IS GONE.	
<u> </u>		•		
SECTION 6 REACTIVITY DATA (CO. STABILITY		9.5	•	
STABLE.	STRONG OXIDIZE	PATIBLE MATERIALS	HAZARDOUS DECOMPO	SITION PRODUCTS
				· · · · · · · · · · · · · · · · · · ·
	- Landa Caracteria de la constanta de la const		<u> </u>	<u> </u>
			The second secon	

. 9	MATERIAL SAFETY DATA SHEET	,·s		Proceedings of the Control of the Co
	(ABCO)		PAGE 3	SUN COL
OBJOURN T	POLY MERITATION WILL NOT OCCUR.	<u></u>		ROQ000033
Š	SICEON			
S.	VENTILATION TO THE MET TO THE TOTAL TOTAL TO THE TOTAL TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TOTAL TOTAL TOTA	20		
1	VENTILATION VENTILATION VENTILATION VENTILATION VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT.			
	PERSONAL PROTECTIVE EQUIPMENT EVE PRODUCT HIMIWALLY INKITATING TO EYES LOCAL SAFE			
•	ELE L MODOCI MINIMALLY INKITATING TO EYES LOCAL SAFE	TY BALLEY		<u> </u>
	GLOVER PRODUITT	TOLICY DECISION.		
	GLOVES PRODUCT MINIMALLY IRRITATING TO SKIN LUCAL SAT	ELV POLITY AL	, 	
	RESPIRATOR CUNCENTER ATTIMENT	THE PECISION.		
	RESPIRATOR CUNCENTRATION-IN-AIR DETERMINES PROTECTION N	LEDED HEE VIII	•	
	OTHER IF CONTACT IS HEREUM	ATO SHOW ATO SHOW	CERTIFIED RESPIRATORY	PROTECTION.
11	OTHER IF CONTACT IS UNAVOIDABLE, WEAR IMPERVIOUS PROT	ECTIVE GEAR-		
	SECTION 8 DISCOGNICIONAL DISCOGNICIONALI DISCOGNICIONALI DISCOGNICIONALI DISCOGNICIONALI DISCOGN			
1	AQUATIC TOXICITY NOT BETERNINED	75.444F		
.	SPILL LEAK OR RELEASE	·		
:	SPILL LEAK OF RELEASE ABSURU ON INERI MATERIAL.			
<u>:</u>				
1	WASTE DISPOSAL			
! ['	WASTE DISPOSAL STATE AND LUCAL REGULATIONS.		·	
	· · · · · · · · · · · · · · · · · · ·			
	SECTION 9 SPECIAL PRECAUTIONS			
h	STORAGE AND HANDING CONDITIONS			
	EEP AWAY FROM HEAT, SPARKS AND FLAME. NFPA CLASS I	MR SYMPTON	The second second	
		STURAGE.		
	•		•	
	SECTION 10 PRECAUTIONARY IALE VIE ARRIVE			•
"	SECTION 10 PRECAUTIONARY LABEL (IF APPLICABLE) U ADDITIONAL PRECAUTIONS AND LABELS		· · · · · · · · · · · · · · · · · · ·	
		16.		
	•			
Ļ				
I				
•		The second state of the second		
	1.647 * 佐藤雄彦高帝松和 1.722 * 5 * 5 * 5 * 5 * 5 * 5 * 5 * 5 * 5 *		Total Control of the	

ORIGINAL (Red)

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION MOBIL SM NO. 6

SUPPLIER:

MOBIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYRCCARBONS AND ADDITIVES

USE OR DESCRIFTION:

BEARING LUBRICANT

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION: (TRN 610766)

********* TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

VISCOSITY:

AT 100 F. SUS

40 C. CS

DARK BROWN VISCOUS LIQUID

400000.0

NEGLIGIBLE

N-

:5000

wiscosity:

AT 210 F. SUS 830.0

AT 100 C. CS NE

NA

CJIM

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

PH:

0.931

MELTING POINT: F(C)

POUR POINT: F(C)

50(10)

TLV(THA):

NA BOILING POINT: F(C)

FLASH POINT: F(C) (METHOD)

>600(316)

>415(213) (ASTM D-92)

VAPOR PRESSURE: MM HG 200

< .1

MA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

INGREDIENTS *************

MG/M3

WT PCT (APPROX)

HAZARDOUS INGREDIENTS:

NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL OILS

< 35

PETROLEUM RESIDUALS

> 60

ADDITIVES AND/OR OTHER INGREDS.

NOTE: THE SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

ORIGINAL (Red)

************** FIRE AND EXPLOSION HAZARD DATA *************

UEL

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL > 415(213) (ASTM D-92)

• 6

EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS. COOL STURAGE DRUMS WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

*********** DATA THRESHOLD LIMIT VALUE: (IF ESTABLISHED)

EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

****** AID PROCEDURES EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

HASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NUT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEEK MEDICAL ASSISTANCE.

************************* REACTIVITY DATA *********** STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID) STRONG OXIDIZERS HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT CCCUR

CONDITIONS TO AVOID:

******************* SPILL OR LEAK PROCEDURE **************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 900-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: ADSORB ON FIRE RETARDANT TREATED SANDUST. DIATOMACEOUS EARTH, ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT

MASTE MANAGEMENT: DILUTE WASTE WITH A SOLVENT. TO REDUCE ITS VISCOSITY. AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND RESULATIONS.

********* SPECIAL PROTECTION INFORMATION ************ EYE PROTECTION: NO SPECIAL EQUIPMENT REGUIRED.

SKIN PROTECTION: NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION: NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

VENTILATION: NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ABEQUATE VENTILATION.

CTHER: ***** SPECIAL PRECAUTIONS

HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

CHARACTERISTICS AT TIME OF DISPOSAL.

********** TOXICOLOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)

NONTOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR
THE COMPONENTS.

CERMAL TOXICITY: (RABBITS)

NONTOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR
THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS

ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY

FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT.

EYE IRRITATION: (RABBITS)

CAUSED NO SIGNIFICANT IRRITATION TO RABBITS. EVE IRRITATION SCORES: 5.5 AT 1 HOUR. 5.0 AT 24 HOURS. 2.0 AT 48 HOURS. 0 AT 72 HOURS

SKIN IRRITATION: (RABBITS)
SLIGHTLY IRRITATING TO RABBITS. PRIMARY IRRITATION SCORE: 1.2/8

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

NONE

FILE CDDES:

(FILL NO: MTL2151J1) MHC: 0 * 0 * NA C 1 US82-106E-XX-81 APPROVE
8341

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 11/ 1/82

ORIGINAL PAGEDI

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. 150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION

MOBILGEAR 630

SUPPLIER:

MOBIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

INDUSTRIAL GEAR OIL

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC)

OTHER DESIGNATION:

(TRN 610873)

********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

0008:

VISCOSITY:

AT 100 F. SUS 1100.0

AT 40 C. CS 210.€

NA

GIUPIL C.6 MTSA

VISCOSITY: AT 210 F. SUS AT 100 C. CS

CLIP

92.0

18.0

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

PH:

9.994

NEGLIGIBLE POUR POINT: F(C)

PELTING POINT: F(C) NA

0(-18)

BUILING POINT: F(C)

FLASH POINT: F(C) (METHOD)

>600(316)

420(216) (ASTM D-92)

TLV(TWA):

VAPOR PRESSURE:MM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES INGREDIENTS *************

MG/M3 PPM

MT PCT CAPPROXI

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL DILS

> 95

ADDITIVES AND/OR OTHER INGREDS.

NOTE: THVS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT GUARANTES. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND <u>WE EXPRESSLY DISCLAIM ALL</u> WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURFOSE IN RESPECT TO THE USE OR SULTABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

MOBILGEAR 630

610873

• €

ORIGINAL

***************** FIRE AND EXPLOSION HAZARD DATA

FLAMMABLE LIMITS: LEL

UEL

FLASH POINT: F(C) (METHOD) 420(216) (ASTM D-92)

EXTINGUISHING MEDIA: CARBON DIOXIDE. FORM, DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

*********************** HEALTH HAZARD DATA ***************

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.00 MG/M3 SUGGESTED FOR OIL MIST EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

********** EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER, IF GREATER THAN 1/2 LITER(PINT) INGESTED. IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN. HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

ARRECTIVITY DATA RECENTED AT A REACTIVITY DATA

STABILITY: «THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOIU)

STRONG DXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

CONDITIONS TO AVOID:

Mobil

MOBILGEAR 630

610873

PAGE 3 ORIGINAL

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SAWDUST. DIATOMACEOUS EARTH, ETC. SHOVEL UP 4.1D DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE MASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATURY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

"MOITALITHEV

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

GIHER:

ORIGINAL (Red)

******************** TOXICOLOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)

SLIGHTLY TOXIC(ESTIMATED) --- HASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RABBITS)

SLIGHTLY TOXIC(ESTIMATED) --- HASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING, USE, OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: RL1221F101 / MHC: 1 * 1 * NA 0 * 1 * US82-119E-162-78 APPROVE 8322

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:

MANAGER OF PRODUCT SAFETY INFORMATION PHONE: (212)883-5594 10/13/82

ORIGINAL PAGE:dil

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. 150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION ************** AMBREX 150

SUPPLIER:

MOBIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

CIRCULATING/TURBINE OIL

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION:

(TRN 620542)

********* TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

GIUGIA C.S MTSA

VISCOSITY:

AT 100 F. SUS 150.0

AT 40 C+ CS 29.0

SDJR:

VISCOSITY:

AT 210 F. SUS

AT 100 C+ CS

MILD

RELATIVE DENSITY: 15/4 C

43.0 SOLUBILITY IN WATER:

5.0 PH:

MG/M3

0.871

NEGLIGIBLE POUR POINT: F(C)

NA

MELTING POINT: F(C)

NA

20(-7)

HOILING POINT: F(C)

FLASH POINT: F(C) (METHOD)

>530(316)

>375(191) (ASTM D-92)

TLV(TWA):

VAPOR PRESSUREIM4 HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

WT. PCT (APPROX)

HAZARDOUS INGREDIENTS:

NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL DILS

> 95

ADDITIVES AND/OR OTHER INGREDS.

NOTE: THYS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND <u>WE EXPRESSLY DISCLAIM ALL</u> WARRANTIES DE EVERY KIND AND NATURE. INCLUDING WARRANTIES DE MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE <u>USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A </u> RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

ORIGINAL 620542

7.0

************ FIRE AND EXPLOSION HAZARD DATA ************

UEL

> 375(191) (ASTM U-92)

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

• 6

EXTINGUISHING MEDIA:

CARBON DIUXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

*********************** HEALTH HAZARD DATA ************ THRESHOLD LIMIT VALUE: (IF ESTABLISHED)

EFFECTS OF OVEREXPOSURE:

SLIGHT EYE IRRITATION. SLIGHT SKIN IRRITATION.

********* AID PROCEDURES EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER. IF GREATER THAN 1/2 LITER(PINT) INGESTED. IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN. HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. 09 NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

************************ REACTIVITY DATA ************* STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID: EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID) STRONG OXIDIZERS

HAZARDOUS DECOMPUSITION PRODUCTS:

CARHON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

CONDITIONS TO AVOID:

*********************** SPILL OR LEAK PROCEDURE *************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERNAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

4DSORB ON FIRE RETARDANT TREATED SAWDUST. DIATOMACEOUS EARTH. ETC.
SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN
ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT
CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISPOSE OF MASTE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

NORMAL INDUSTRIAL EYE PROTECTION PRACTICES SHOULD BE EMPLOYED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER. GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

OTHER:

***** TOXICOLOGICAL DATA

ACUTE

OR!GINA: (Red)

GRAL TOXICITY: (RATS)

LOSO: > 5 G/KG SLIGHTLY TOXIC (ESTIMATED) --- HASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL FOXICITY: (RABBITS)

LD50: > 2 G/KG SLIGHTLY TOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: MTL59A001) MHC: 1 * 1 * NA 1 * 1 * US82-062E-205-72 APPROVE
8215

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION, PHONE:(212)883-5594 6/28/82

PAGE 1

MOBIL MATERIAL SAFETY DATA BULLETIN

ORIGINAL (Red)

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. 150 EAST 42ND STREET

NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION ************ AMBREX 300

SUPPLIER:

MOBIL OIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

CIRCULATING/TURBINE OIL

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC)

OTHER DESIGNATION: (TRN 620583)

TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

0008:

ASTM 5.0 LIQUID

VISCOSITY:

AT 190 F. SUS

AT 40 C+ CS 57.0

NΔ

295.0

53•ü

AT 210 F. SUS VISCOSITY:

AT 130 C. CS 8.0

MILD

RELATIVE DENSITY: 15/4 C

U-881

SOLUBILITY IN MATER:

PH:

NEGLIGIBLE

MELTING POINT: F(C)

NA

POUR POINT: F(C) 20(-7)

BOILING POINT: F(C)

>600 (316)

FLASH POINT: F(C) (METHOD)

>400(204) (ASTM D-92)

VAPOR PRESSURE: MM HG 20C

< .1

NA=NOT APPLICABLE

NE=NOT ESTABLISHED D=DECOMPOSES

TLV(THA):

INGREDIENTS **********

> MG/M3 PPM

WT PCT (APPROX)

HAZARDJUS INGREDIENTS:

SACK

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL OILS

> 95

ADDITIVES AND/OR OTHER INGREDS.

NOTE: THE SHEAR FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN MEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND <u>WE EXPRESSLY DISCLAIM ALL</u> MARRANTIES OF EVERY KIND AND NATURE. INCLUDING MARRANTIES OF <u>MERCHANIABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT IO THE</u> USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

AMBREX 300

620583

• 5

ORIGINAL (Red) PAGE 2

********* *** * FIRE AND EXPLOSION HAZARD DATA *************

FLASH POINT: F(C) (METHOD)

FLAMMABLE LIMITS: LEL

UEL

7.0

> 400(204) (ASTM D-92) EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED HREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

THRESHOLD LIMIT VALUE: (IF ESTABLISHED)

EFFECTS OF OVEREXPOSURE:

SLIGHT EYE IRRITATION. SLIGHT SKIN IRRITATION.

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SUAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER, IF GREATER THAN 1/2 LITER(PINT) INGESTED, IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN, HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

********************* REACTIVITY DATA ****************

STABILITY: (THERMAL. LIGHT. ETC.) CONDITIONS TO AVOID:

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)
STRONG OXIDIZERS
HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

CONDITIONS TO AVOID:

WILL NOT OCCUR

******************* SPILL OR LEAK PROCEDURE ***************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. CJAST GUARD REGULATIONS REQUIRE IMPEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SAWDUST. DIATOMACEOUS EARTH. ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE WASTE IN A SULVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

*************** SPECIAL PROTECTION INFORMATION ************* EYE PROTECTION:

NORMAL INDUSTRIAL EYE PROTECTION PRACTICES SHOULD BE EMPLOYED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER. GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

OTHER:

HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

ORIGINA (Red)

****** TOXICOLOGICAL DATA ****************

ACUTE

ORAL TOXICITY: (RATS)

Mobil

LD50: > 5 G/KG 2/10 RATS DIED AT THIS DOSAGE LEVEL. SLIGHTLY TOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RABBITS)

LD50: > 2 G/KG D/10 RABBITS DIED AT THIS DOSAGE LEVEL. SLIGHTLY TOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING, USE, OR MISUSE OF THIS PRODUCT.

EYE IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION. EYE IRRITATION SCORES: 3.3 AT 24 HOURS. D AT 48 HOURS. D. AT 72 HOURS---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT.

PRIMARY IRRITATION SCORE: 0/8---BASED ON TESTING OF SIMILAR PRODUCTS

AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: MTLE9C22J2) MHC: 1 + 1 * NA 1 + 1 * USB2-062E-205-72 AFPROVE
8282

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 9/ 3/82

40 C. CS

20.0

AT 100 C. CS

NA

3.7

PH:

ORIGINAL (Red)

PAGE 1

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION FLOWREX 100

SUPPLIER: MOBIL DIL CORP. CHEMICAL NAMES AND SYNONYMS:

PETROLEUM HYDROCARBONS USE OR DESCRIPTION: LUBRICATING OIL

HEALTH EMERGENCY TELEPHONE: (212)893-4411 .TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC) OTHER DESIGNATION:

(TRN 621581)

>300(149) (ASTM D-92)

*********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

VISCOSITY:

VISCOSITY:

APPEARANCE:

ASTM 3.5 LIJUID

OJOR:

MILD RELATIVE DENSITY: 15/4 C

0.915

MELTING POINT: F(C)

NΑ

BOILING POINT: F(C)

>600 (316)

VAPOR PRESSURE: MM HG 200

NE=NOT ESTABLISHED D=DECOMPOSES NA = NOT APPLICABLE

POUR POINT: F(C)

INGREDIENTS

MT PCT

SOLUBILITY IN WATER:

TLV(TWA):

AT 100 F. SUS

110.0

AT 210 F. SUS

NEGLIGIBLE

5(-18)

FLASH POINT: F(C) (METHOD)

38.0

MG/M3

PPM

(APPROX)

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS: REFINED MINERAL OILS

100

NOTE: THYS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE HEVOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND <u>WE EXPRESSLY DISCLAIM ALL</u> WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

FLOWREX 100

621581

ORIGINAL PAGE 2

************* **** FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

UEL

7 • C

> 300(149) (ASTH D-92) EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

************ AAAAAAAAAAAAA HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.00 MG/M3 SUGGESTED FOR OIL MIST EFFECTS OF DVEREXPOSURE:

SLIGHT SKIN IRRITATION.

********* AID PROCEDURES

EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

JASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO HE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEIK MEDICAL ASSISTANCE.

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)

STRONG OXIDIZERS

HAZARDOUS DECCMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT CCCUR

CONDITIONS TO AVOID:

621581

ORIGINAL

(Red)

****************** SPILL OR LEAK PROCEDURE ****************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SANDUST. DIATOMACEOUS EARTH, ETC.

SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE MASTE DISPOSAL FACILITY IN

ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT

CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:
DISPOSE OF WASTE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH
ABEQUATE VENTILATION.

FLOHREX 100

621581

ORIGINAL (Red) PAGE 4

****** TOXICOLOGICAL DATA

ACUTE

CRAL TOXICITY: (RATS)

LD50: > 5 G/KG NONTOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RABBITS)

LOSD: > 2 G/KG NONTOXIC(ESTIMATED) --- HASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING, USE, OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT. --- BASED ON FESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: TSD037J02) MHC: 0 * 0 * NA 0 * 1 * US82-084NONE APPROVE
8294

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594

9/15/82

(Red) PAGE 1

ORIGINAL

621649

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION FLOWREX 200

SUPPLIER:

MOSIL DIE CORP.

CHEMICAL NAMES AND SYNONYMS:

PETROLEUM HYDROCARBONS

USE OR DESCRIPTION:

LUBRICANI

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION: (TRN 621649)

********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

ASTM 3.5 LIQUID

VISCOSITY:

AT 100 F. SUS

AT 40 C. CS

0104:

VISCOSITY:

200.0 AT 210 F. SUS -44.0

39.0 AT 100 C. CS

MILD

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

5.0

3.912

NEGLIGIBLE

PH: NA

MG/M3

MELTING POINT: FCC.

NA

POUR POINT: F(C)

0(-18)

BOILING POINT: F(C)

>600(316)

FLASH POINT: F(C) (METHOD)

>330(166) (ASTM D-92)

TLV(THA):

VAPOR PRESSURE: MM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

INGREDIENTS **********

PPE

HT PCT (APPROX)

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS: REFINED MINERAL DILS

160

NOTE: THYS SHOWN FOR GUIDANCE ONLY. FULLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES DE EVERY KIND AND NATURE. INCLUDING WARRANTIES OF <u>MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURFOSE IN RESPECT TO THE</u> <u>USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A </u> RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

621649

ORIGINAL (Red) PAGE 2

7.0

******* DATA ******* FIRE AND EXPLOSION HAZARD DATA *************

THE REPORT OF THE PROPERTY OF

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

UEL

•6

> 333(166) (ASTM D-92) EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZAROS:

5.00 MG/M3 SUGGESTED FOR OIL MIST EFFECTS OF OVEREXPOSURE:
SLIGHT SKIN IRRITATION.

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEEK MEDICAL ASSISTANCE.

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)
STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

CARHON MONUXIDE.

FAZARDOUS POLYMERIZATION:

WILL NOT CCCUR

CONDITIONS TO AVOID:

ORIGINAL (Red)

621649

******************* SPILL OR LEAK PROCEDURE ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SANDUST. DIATOMACEOUS EARTH. ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE WASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

*************** SPECIAL PROTECTION INFORMATION ************ EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATURY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

CTHER:

******************* SPECIAL PRECAUTIONS HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

621649

TOXICOLOGICAL DATA

ACUTE

GRAL TOXICITY: (RATS)

LD5J: > 15 G/KG NONTOXIC(ESTIMATED) ---HASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

CERMAL TOXICITY: (RABBITS)

LOSO: > 5 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING, USE, OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. ---BASED ON TESTING OF SIMILAR FRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONSED OR REPEATED CONTACT. ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES: (FILL NO: TSD J39202) MHC: 0 * 0 * NA 0 * 1 * US82-C84NONE APPROVE 8294 ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED: MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 9/15/82

(Deal 621797 PAGE 1

ORIGINAL

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION - ************** FLOWREX 503

SUPPLIER:

. ASSOL OIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PETROLEUM HYDROCARBONS

USE OR DESCRIPTION:

LUBRICANT

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION: (TRN 621797)

********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

VISCOSITY:

VISCOSITY:

APPEARANCE:

ASTM 6.5 LIQUID

****** INGREDIENTS

AT 210 F. SUS

AT 100 F. SUS -500**-0**

56.0

AT 40 C. CS

95.0

CODR:

MILD

SOLUBILITY IN WATER:

POUR POINT: F(C)

AT 100 C. CS R.O

RELATIVE DENSITY: 15/4 C

J. 72

NEGLIGIBLE

PH:

NA

MELTING POINT: F(C)

BOILING POINT: FCC)

>633(316)

7(-18)

FLASH POINT: F(C) (METHOD) >375(191) (ASTM D-92)

TLV(TWA):

VAPOR PRESSURE:MM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

MG/M3

PPM

WT PCT (APPROXI

HAZARDOUS INGREDIENTS: NONE

NUN-HAZARDOUS INGREDIENTS: REFINED MINERAL OILS

100

NOTE: THYS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND <u>WE EXPRESSLY DISCLAIM ALL</u> MARRANTIES OF EVERY KIND AND NATURE. INCLUDING MARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALLE PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

621797

ORIGINAL

****** **** FIRE AND EXPLOSION HAZARD DATA ***********

UE L

> 375(191) (ASTM D-92)

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL • 6

7.0

EXTINGUISHING MEDIA:

CARBON DIGXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

************************* HEALTH HAZARD SATA ************

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.00 Mg/M3 SUGGESTED FOR OIL MIST EFFECTS OF DVEREXPUSURE: NOT EXPECTED TO BE A PROBLEM.

********* EMERGENCY AND FIRST AID PROCEDURES **********

EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEEK MEDICAL ASSISTANCE.

********************* REACTIVITY DATA ********** STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID: EXTREME HEAT STABLE

INCOMPATIBLEITY: (MATERIALS TO AVOID) STRONG OXIDIZERS HAZAROJUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT CCCUR

CONDITIONS TO AVOID:

FLOWREX 500

OORIGINAL (F(Red) -PAGE 3

621797

١

******************** SPILL OR LEAK PROCEDURE ****** ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SFILLED:

ADSORS ON FIRE RETARDANT TREATED SAWDUST, DIATOMACEOUS EARTH, ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE WASTE IN A SULVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

**************** SPECIAL PROTECTION INFORMATION

EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

VENTILATION:

ND SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEBUATE VENTILATION.

OTHER:

***** SPECIAL PRECAUTIONS

HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

ORIGINAL (Red) 97 PAGE 4

621797

ACUTE

ORAL TOXICITY: (RATS)

LD50: > 15 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RABBITS)

LD50: > 5 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/CR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: TSD041302) MHC: 0* 0* NA 0* 0* US82-150NONE APPROVE
8307

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT*

MANAGER OF PRODUCT SAFETY INFORMATION* PHONE: (212)883-5594

9/28/82



MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK, N.Y. 10017 (USA)

PRODUCT IDENTIFICATION *************** RUBREX 200

SUPPLIER: MOBIL DIL CORP. CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION: TUBRICANT

HEALTH EMERGENCY TELEPHONE: (212)883-4411 TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC) OTHER DESIGNATION:

******** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES ********

APPEARANCE:

ASTM 2.0 LIQUID

opoa: MILD

RELATIVE DENSITY: 15/4 C

0.875

MELTING POINT: F(C)

NA

BOILING POINT: F(C)

>690(316)

VAPUR PRESSURE: MM HG 200

VISCOSITY: AT 100 F. SUS

200.0 VISCOSITY:

AT 216 F. SUS 46.0

SOLUBILITY IN WATER:

NEGLIGIBLE POUR POINT: F(C)

(TRN 621888)

20(-7) FLASH POINT: F(C) (METHOD)

>410(210) (ASTM D-92)

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

MT PCT

TLV(THA):

MG/M3

PPM

AT 40 C. CS

AT 100 C. CS

NA

5.9

PH:

37.0

∢APPRCXI

HAZARDOUS INGREDIENTS: NINE

NON-HAZARDOUS INGREDIENTS: > 95 REFINED MENERAL DILS ADDITIVES AND/OR OTHER INGREDS. . < 5

NOTE: THYS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SULTABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING FROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

.6

***************** FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL > 410(21)) (ASTM D-92)

UEL

7.0

EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

********************** HEALTH HAZARD DATA ************ THRESHOLD LIMIT VALUE: (IF ESTABLISHED)

EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

************ EMERGENCY AND FIRST AID PROCEDURES ***** EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEEK MEDICAL ASSISTANCE. DO NOT INDUCE VOMITING. (NOTE TO PHYSICIAN: MATERIAL IF ASPIRATED INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONITIS. TREAT APPROPRIATELY)

****** REACTIVITY DATA STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)

STRONG DXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONUXIDE.

WILL NOT OCCUR

HAZARDOUS POLYMERIZATION: CONDITIONS TO AVOID:

(Red) ORIGINAL RUBREX 200

621888 PAGE 3

NOBREA 2

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SAWDUST, DIATOMACEOUS EARTH, ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS, AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

Mobil

DISSOLVE WASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

OTHER:

621888

ORIGINAL (Red) PAGE 4

ACUTE

ORAL TOXICITY: (RATS)
LD5D: > 15 G/KG NONTOXIC(ESTIMATED) ---BASED ON TESTING OF
SIMILAR PRODUCTS AND/OR THE COMPONENTS.

CERMAL FOXICITY: (RABBITS)

LD50: > 8 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS

ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY

FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT.

EYE IRRITATION: (RABBITS)

EXPECTED TO BE MON-TRRITATING. ---BASED ON TESTING OF SIMILAR

EXPECTED TO BE NON-IRRITATING. ---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT.

---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: FSD044001) MHC: 0 * 0 * NA 0 * 1 * US82-062NONE APPROVE
8215

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION PHONE: (212)883-5594 6/28/82

665547

ORIGINAL (Red) PAGE 1

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CURFORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION MOBILMET OMICRON

SUPPLIER:

MOBIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

CUTTING FLUID

HEALTH EMERGENCY TELEPHONE:

(212)683-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION:

(TRN 665547)

******** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *********

APPEARANCE:

000R:

ASTM 5.5 LIQUID

VISCOSITY:

AT 100 F. SUS .VISCOSITY:

AT 40 C+ CS

138.0 AT 210 F. SUS

42.0

24.6 AT 100 C. CS

NA

MILD.

RELATIVE DENSITY: 15/4 C.

0.865

SOLUBILITY IN WATER:

4.9 PH:

MELTING POINT: F(C)

NA

POUR POINT: F(C)

30 (-1)

NEGLIGIBLE

BOILING POINT: F(C)

>600(316)

FLASH POINT: F(C) (METHOD)

>365(185) (ASTM D-92)

VAPOR PRESSURE: MM HG 200

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

TLV(TWA):

PPM MG/M3

WT PCT (APPRGX)

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL DILS

> 95

AUDITIVES AND/OR OTHER INGREDS.

NOTE: THUS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL; ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL HARRANTIES DE EVERY KIND AND NATURE. INCLUDING HARRANTIES DE MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURFOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OF AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD HE PROVIDED TO HANDLERS AND USERS.

Mobil

665547

********** FIRE AND EXPLOSION HAZARD DATA ***********

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

UEL

> 365(185) (ASTM D-92)

7. C

EXTINGUISHING MEDIA:

CARBON DICKIDE, FOAM, DRY CHEMICAL AND JATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

************************* HEALTH MAZARD DATA THRESHOLD LIMIT VALUE: (IF ESTABLISHED)

EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

********* AID PROCEDURES ******* EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER. IF GREATER THAN 1/2 LITER (PINT) INGESTED. IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN, HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

EXTREME HEAT STABLE

INCOMPATIBILITY: (MATERIALS TO AVOID) STRONG DXIDIZERS -

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

CONDITIONS TO AVOID:

665547 PAGE 3

********************* SPILL OR LEAK PROCEDURE **************

ENVIRONMENTAL IMPACT:

CTAER:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST JUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SANDUST. DIATOMACEOUS EARTH, ETC.

SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN

ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT

CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:
DISSOLVE WASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION
IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER. GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH

ADEQUATE VENTILATION.

MOBILMET OMICRON

665547 PAGE 4

************************ TOXICOLOGICAL DATA

ACUTE

GRAL TOXICITY: (RATS)

LD50: > 5 G/KG SLIGHTLY TOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RABBITS)

LD50: > 5 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

LC50: >5 Mg/L FOR 4 HRS. 0/10 RATS DIED AT THIS DOSAGE LEVEL. NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

EYE IRRITATION: (RABBITS)

CAUSED NO SIGNIFICANT IRRITATION TO RABBITS. EYE IRRITATION SCORES: 1.5 AT 1 HOUR. 0 AT 24 HOURS. 0 AT 48 HOURS. C AT 72 HOURS. C AT 4 DAYS. 0 AT 7 DAYS.

SKIN IRRITATION: (RABBITS)

SLIGHTLY IRRITATING TO RABBITS. PRIMARY IRRITATION SCORE: .9/8

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

****THIS MIXTURE OR A SIMILAR MIXTURE DID NOT RESULT IN ANY FATALITIES TO RATS AT CONCENTRATIONS (SEE INHALATION TOXICITY ABOVE) SUBSTANTIALLY HIGHER THAN THE 5 MG/M3 TLV SUGGESTED FOR OIL MISTS.

FILE CODES:

(FILL NO: RJ126A212) MHC: 1* G* O* 0 1 US83-003NONE APPROVE
8504
ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 4/13/83

ORIGINAL 665554

AT 40 C. CS

AT 100 C. CS

2.7

NA

10-2

PH:

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. 150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION MOBILMET UPSILON

SUPPLIER:

MOBIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

CUTTING FLUID

HEALTH EMERGENCY TELEPHONE:

(212)863-4411

TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC)

OTHER DESIGNATION:

(TRN 665554)

>325(163) (ASTM D-92)

AT 100 F. SUS

AT 210 F. SUS

35.1

62. Ú

NEGLIGIBLE

33 (-1)

**** ******** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

VISCOSITY:

VISCOSITY:

APPEARANCE:

ASTM 5.0 LIQUID

:5000

GJIM

RELATIVE DENSITY: 15/4 C

0.847

MELTING POINT: FCC)

NΑ

BOILING POINT: F(C)

>600 (316)

VAPOR PRESSURE: MM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES.

INGREDIENTS *************

POUR POINT: F(C)

MT PCT TLV(TWA):

FLASH POINT: F(C) (METHOD)

MG/M3

(APPROXI

SOLUBILITY IN WATER:

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL OILS

> 95

ADDITIVES AND/OR OTHER INGREDS.

NOTE: THAS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFURE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL MARRANTIES OF EVERY KIND AND NATURE. INCLUDING MARRANTIES OF MERCHANTABILLITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE HARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

Mobil MOHILMET UPSILON

665554 PAGE 2

************** FIRE AND EXPLOSION HAZARD DATA

UEL

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL > 325(163) (ASTM D-92)

• 6

7.0

EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NUNE

********************* HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.03 MG/M3 SUGGESTED FOR OIL MIST

EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

********* ** ** EMERGENCY AND FIRST AID PROCEDURES **********

EYE CUNTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

DO NOT INDUCE VOMITING. ADMINISTER VEGETABLE GIL. GET MEDICAL ASSISTANCE. (NOTE TO PHYSICIAN: MATERIAL IF ASPIRATED INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONITIS. TREAT APPROPRIATELY)

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

EXTREME HEAT STABLE

INCOMPATIBILITY: (MATERIALS TO AVOID) STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT CCCUR

CONDITIONS TO AVOID:

MOBILMET UPSILON

ORIGINAL PARFER 665554

********************** SPILL OR LEAK PROCEDURE ********************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO CCAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORD ON FIRE RETARDANT TREATED SANDUST. DIATOMACEOUS EARTH. ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISPOSE OF WASTE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

*********** SPECIAL PROTECTION INFORMATION ************ EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALMAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

******************** SPECIAL PRECAUTIONS *************** HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

STORAGE: SEE APPENDIX FOR PRECAUTIONARY LABEL. 1 L99

ORIGINAL PAGFECA



****** TOXICOLOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)

SLIGHTLY TOXIC(ESTIMATED) --- BASED ON TESTING OF LD50: > 5 G/KG SIMILAR PRODUCTS AND/OR THE COMPONENTS.

CERMAL TOXICITY: (RABBITS)

LD50: > 2 G/KG SLIGHTLY TOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

LC50: >5 MG/L FOR 4 HRS. 0/10 RATS DIED AT THIS DOSAGE LEVEL. PRACTICALLY NONTOXIC

EYE IRRITATION: (RABBITS)

CAUSED NO SIGNIFICANT IRRITATION TO RABBITS. EYE IRRITATION SCORES: 2.3 AT 1 HOUR, 0.1 AT 24 HOURS, 0 AT 7 CAYS.

SKIN IRRITATION: (RABBITS)

SLIGHTLY IRRITATING TO RABBITS. PRIMARY IRRITATION SCORE: 1.6/8

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

****THIS MIKTURE OR A SIMILAR MIXTURE DID NOT RESULT IN ANY FATALITIES TO RATS AT CONCENTRATIONS (SEE INHALATION TOXICITY ABOVE) SUBSTANTIALLY HIGHER THAN THE 5 MG/M3 TLV SUGGESTED FOR OIL MISTS.

FILE CIDES: (FILL NO: RJ1304201) MHC: 1 * 1 * 0 0 1 US83-003NONE APPROVE REVISED: ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 4/13/83

665554

ORIGINAL (Red) -

APPENDIX

PRECAUTIONARY LABEL TEXT FOR PACKAGED PRODUCTS

CUTTING FLUID
FOR METAL PROCESSING ONLY

CALTION.

AVOID PROLONGED OR REPEATED SKIN CONTACT.
WASH SKIN THOROUGHLY WITH SOAP AND WATER AFTER PROLONGED CONTACT.
AVOID WEARING OF CLOTHING SOAKED WITH FLUID.
AVOID INHALATION OF MIST OR VAPOR.

FOR INDUSTRIAL USE ONLY

MOBIL DIL CORPORATION NEW YORK NY L-99(10-69)

- Mobil

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL DIL CORFORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION *************** VACMUL A6

SUPPLIER:

MOBIL DIL CORP. T

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

METAL PROCESSING OIL

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC)

OTHER DESIGNATION:

(TRN 671859)

>380(193) (ASTM D-92)

TLV(TWA):

********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

VISCOSITY:

AT 100 F. SUS 275.0

47.0

AT 40 C+ C5 42.0

ASTM 5.3 LIQUID

VISCOSITY:

AT 210 F. SUS

NEGLIGIBLE

25(-4)

AT 100 C. CS 6.0

NA

PH:

MILD

RELATIVE DENSITY: 15/4 C

0.376

15000

MELTING POINT: F(C) N4

BOILING POINT: F(C)

>600(316)

VAPOR PRESSURE: NM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

kanannannannannannan ingredients mammakannannannannannannan

MT PCT

FLASH POINT: F(C) (METHOD)

SOLUBILITY IN WATER:

POUR POINT: F(C)

(APPROX)

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL OILS

> 90 < 10

ADDITIVES AND/OR OTHER INGREDS. CHLORINATED PARAFFIN WAX

NOTE: THE SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANIABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

ORIGINAL (Red) 671859 PAGE 2

***************** FIRE AND EXPLOSION HAZARD DATA ***********

UEL

> 380(193) (ASTM D-92)

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

7 • C

EXTINGUISHING MEDIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.30 MG/M3 SUGGESTED FOR OIL MIST EFFECTS OF OVEREXPOSURE:

SLIGHT SKIN IRRITATION.

************ EMERGENCY AND FIRST AID PROCEDURES ********** EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INDITALATION:

REMOVE FROM FURTHER EXPOSURE. IF UNCONSCIOUSNESS OCCURS. SEEK IMMEDIATE MEDICAL ASSISTANCE AND CALL A PHYSICIAN. IF BREATHING HAS STUPPED. USE MOUTH TO MOUTH RESUSCITATION.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER. IF GREATER THAN 1/2 LITER(PINT) INGESTED, IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN. HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. CO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)

STRONG JXIDIZERS

HAZARDOUS JECCMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYPERIZATION:

WILL NOT CCCUR

CONDITIONS TO AVOID:

ORIGINAL

671859

(Red) PAGE 3

******************* SPILL OR LEAK PROCEDURE **************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST JUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SANDUST. DIATOMACEOUS EARTH. ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE WASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

***************** SPECIAL PROTECTION INFORMATION ******

EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER. GOOD PERSONAL HYGIENS PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

:NCITALITYSV

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

CTHER:

***** SPECIAL PRECAUTIONS

HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

****************** TOXICOLOGICAL DATA

ACUTE

CRAL TOXICITY: (RATS)

SLIGHTLY TOXICLESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS
AND/OR THE COMPONENTS.

CERMAL TOXICITY: (RABBITS)

SLIGHTLY TOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS
AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)
NOT ESTABLISHED

EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. ---BASED ON TESTING OF SIMILAR
PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RAHBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT.

---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY 4SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES: (FILL NO: TSD034

J MHC: 1 * 1 * NE 6 * 1 * US82-107NONE

APPROVE

8293

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. PANAGER OF PRODUCT SAFETY INFORMATION. PHONE: (212)883-5594

REVISED: 9/14/82

ORIGINAL (Red) PAGE 1

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL DIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. 150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION MOBILTHERM 603

SUPPLIER:

MOSIL DIL CORP.

CHEMICAL NAMES AND SYNUNYMS:

PETROLEUM HYDROCARBONS

USE OR DESCRIPTION: HEAT TRANSFER OIL HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT FMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC)

OTHER DESIGNATION: (TRN 680512)

********* TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

OBOR:

ASTM 2.0 LIQUID

VISCOSITY:

AT 100 F. SUS

AT 40 C. CS 26.0

NΔ

105.0

VISCOSITY: AT 210 F. SUS 40.0

AT 100 C. CS

CLIM

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

4.1 PH:

0.855

MELTING POINT: F(C)

NEGLIGIBLE POUR POINT: F(C)

20 (-7)

NA

BOILING POINT: F(C) >609 (31.6)

FLASH POINT: F(C) (METHOD)

390(193) (ASTM D-92)

VAPOR PRESSURE: MM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

TLV(THA):

INGREDIENTS ***********

MG/M3

(APPROX)

MT PCT

HAZARDJUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS: REFINED MINERAL OILS

100

NOTE: THE SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

• 6

680512

ORIGINAL

*************** FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL 380(193) (ASTM D-92)

UEL 7.G

EXTINGUISHING MEDIA:

CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED HREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

*********************** HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.00 MG/M3 SUGGESTED FOR OIL MIST EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

********* *** * *** EMERGENCY AND FIRST AID PROCEDURES ************ EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEIK MEDICAL ASSISTANCE.

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STRONG OXIDATION STABLE

INCOMPATIBILITY: (MATERIALS TO AVOID) STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MCNCXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT CCCUR

conditions to Avoid:

PAGE 3 680512

**** SPILL OR LEAK PROCEDURE ************* ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERMAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PRICEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SAWDUST. DIATOMACEDUS EARTH. ETC. SHOVEL UP AND DISPUSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISPOSE OF WASTE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

************ SPECIAL PROTECTION INFORMATION ************

EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS HE FOLLOWED.

RESPERATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

OTHER:

****************** SPECIAL PRECAUTIONS HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

ORIGINAL

680512

TOXICOLOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)

LD50: > 15 G/KG PRACTICALLY NONTOXIC

DERMAL TOXICITY: (RABBITS)

LOSJ: > 5 G/KG PRACTICALLY NONTOXIC

INHALATION TOXICITY: (RATS)

NOT APPLICABLE --- HARMFUL CONCENTRATIONS OF MISTS AND/OR VAFORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT.

EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES: US81-246E-188-78 APPROVE (FILL NO: MTN460A007) MHC: C NA C + 1+ 8034 ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED: MANAGER OF PRODUCT SAFETY INFORMATION. PHONE: (212)883-5594 2/17/82

621847-34 PAGE 1

ORIGINAL.

iRed)

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION ************** RUBREX 150

SUPPLIER: MOBIL DIL CORP. CHEMICAL NAMES AND SYNONYMS: PETROLEUM HYDROCARBONS

USE OR DESCRIPTION: LUBRICANT

HEALTH EMERGENCY TELEPHONE: (212)883-4411 TRANSPORT EMERGENCY TELEPHONE: (800)424-9300 (CHEMTREC) OTHER DESIGNATION: (TRN 621847-34)

********* TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

ASTM 2.0 LIQUID

195.0

AT 40 C+ CS 20.5

VISCOSITY: AT 210 F. SUS 4T 100 C. CS

000R: CJIM

40.0

4-1

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

PH:

3.36

NEGLIGIBLE

NΔ

MELTING POINT: F(C)

POUR POINT: F(C)

VISCOSITY:

23(-7)

NA

FLASH POINT: F(C) (METHOD)

BOILING POINT: FCC. >600 (315)

>380(193) (ASTM D-92)

VAPOR PRESSURE:MM HG 200

NA=NOT APPLICABLE

NE=NOT ESTABLISHED D=DECOMPOSES

TLV(TWA):

AT 100 F. SUS

INGREDIENTS ******

PPM MG/M3

MT PCT (APPROX)

HAZARDOUS INGREDIENTS: BACK

NON-HAZARDOUS INGREDIENTS: REFINED MINERAL OILS

100

NOTE: THE SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE <u>expressly disclaim</u> <u>all</u> WARRANTIES OF EVERY KIND AND NATURE. INCLUDING WARRANTIES OF MERCHANTABLITY AND FITNESS FOR A PARTICULAR FURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING APPROPRIATE MARNINGS AND SAFE HANDLING LICENSE UNDER VALID PATENTS. PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

Mobil

********** FIRE AND EXPLOSION HAZARD DATA ***********

UEL

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL > 383(193) (ASTM D-92)

7.0

621847-34 PAGE 2

EXTINGUISHING MEDIA:

CARBON DIOXIDE, FOAM, DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

EFFECTS OF OVEREXPOSURE:
SLIGHT SKIN IRRITATION.

FLUSH WITH WATER.

SKIN CONFACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCUMFORTABLE SEEK MEDICAL ASSISTANCE. DO NOT INDUCE VOMITING. (NOTE TO PHYSICIAN: MATERIAL IF ASPIRATED INTO THE LUNGS MAY CAUSE CHEMICAL PNEUMONITIS. THEAT APPROPRIATELY)

STABLE EXTREME WEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)
SIRONG OXIDIZERS
HAZAROJUS DECCMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:
WILL NOT CCCUR

CONDITIONS TO AVOID:

621847-34 PAGE 3



ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERNAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8832.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SAWOUST, DIATOMACEOUS EARTH, ETC. SHOVEL UP AND DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISPOSE OF MASTE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

********** SPECIAL PROTECTION INFORMATION **************

EYE PROTECTION:

NJ SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER. GCOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADDIQUATE VENTILATION.

CTHEK:

HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

621847-344PAGE 4

TOXICOLOGICAL DATA

ACUTE

ORAL TUXICITY: (RATS)

LOSD: > 15 G/KG NONTOXIC(ESTIMATED) --- HASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RAHBITS)

LD50: > 8 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS A DOOR THE COMPONENTS.

SKIN IRRITATION: (RAHBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: MTN4604086) MHC: 0 + 0 + NA 9 + 1 * US82-062NONE APPROVE

8215

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:

MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 6/28/82

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL OIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION MOBILARMA 524

SUPPLIER:

MOBIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

RUST PREVENTIVE

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION:

(TRN 667139)

********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

ASIM 5.0 LIQUID

VISCOSITY: AT 100 F. SUS 460.0

40 C. CS 88.4

3008:

AT 213 F. SUS VISCOSITY:

AT 100 C. CS

NA

MILD

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

61.5

10.4 PH:

0.884

MELTING POINT: F(C) NΔ

POUR POINT: F(C)

0(-13)

NEGLIGIBLE

EDILING POINT: F(C)

>600 (316)

FLASH POINT: F(C) (METHOD)

425(218) (OPEN CUP)

TLV(THA):

VAPOR PRESSURE:NM HG 20C

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

INGREDIENTS ******

PPM

MG/M3

MT PCT (APPROX)

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL OILS

> 90

ADDITIVES AND OR OTHER INGREDS.

NOTE: THE SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL MARRANTIES DE EVERY KIND AND NATURE. INCLUDING MARRANTIES DE MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

NΞ

ORIGINAL (Red) PAGE 2

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

UEL NE

425(218) (OPEN CUP) EXTINGUISHING MEDIA:

CO2. FOAM. DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

*********************** HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (IF ESTABLISHED) 5.00 Mg/M3 SUGGESTED FOR OIL MIST EFFECTS OF DVEREXPOSURE:

NOT EXPECTED TO BE A PROBLEM.

************* *** EMERGENCY AND FIRST AID PROCEDURES *****

EYE CONTACT:

FLUSH WITH WATER.

SKIN CONTACT:

JASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM WHEN INGESTED. IF UNCOMFORTABLE SEEK MEDICAL ASSISTANCE.

*********************** REACTIVITY DATA ****************

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STABLE STRONG OXIDATION

INCOMPATIBILITY: (MATERIALS TO AVOID) STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONGXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

CONDITIONS TO AVOID:

ORIGINAL (Red) PAGE 3

******************* SPILL OR LEAK PROCEDURE *****************

and the first of the second of

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORD ON FIRE RETARDANT TREATED SAMOUST, DIATOMACEOUS EARTH, ETC.

SCRAPE UP AND REMOVE. DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL

FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS, AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSULVE WASTE IN A SULVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

****************** SPECIAL PROTECTION INFORMATION ***************

EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER. GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEQUATE VENTILATION.

OTHER:

TOXICULOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)
LD50: > 15 G/KG NONTOXIC(ESTIMATED) ---BASED ON TESTING OF
SIMILAR PRODUCTS AND/OR THE COMPONENTS.

CERMAL TOXICITY: (RABBITS)

LD50: > 5 G/KG NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS

ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY

FORESEEABLE HANDLING. USE. OR MISUSE OF THIS PRODUCT.

EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/GRITHE COMPONENTS.

SKIN LARITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. --- BASED ON TESTING OF SIMILAR PRODUCTS AND/CR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

'FILE CODES: MHC:)* 0* 0*

APPROVE 7611

ORIGINAL (Red) PAGE 1

MOBIL MATERIAL SAFETY DATA BULLETIN

MOBIL DIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. 150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION MOBILARMA 355

SUPPLIER:

MUSIL DIL CORP.

CHEMICAL NAMES AND SYNONYMS:

PET. HYDROCARBONS AND ADDITIVES

USE OR DESCRIPTION:

RUST PREVENTIVE

HEALTH EMERGENCY TELEPHONE:

(212)883-4411

TRANSPORT EMERGENCY TELEPHONE:

(800)424-9300 (CHEMTREC)

OTHER DESIGNATION: (TRN 667055)

*********** TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

VISCOSITY:

AT 100 F. SUS

NE

AT 40 C. CS

ASTM 3.5 SEMI-SOLID ODOR:

VISCOSITY:

AT 210 F. SUS

NEGLIGIBLE

AT 169 C. CS

MILD

100.0

8.5

ΝΔ

RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

PH:

ΝE

9.87

MELTING POINT: F(C)

POUR POINT: F(C)

NA HOILING POINT: F(C) NE

>600 (316)

FLASH POINT: F(C) (METHOD)

370(188) (ASTM D-92)

TLV(THA):

VAPOR PRESSURE: MM HG 200

< .1

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

INGREDIENTS ******

MG/M3

(APPROX)

WT PCT

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS:

REFINED MINERAL OILS

< 40

PETRULATUMS

> 55

ADDITIVES AND/OR OTHER INGREDS.

NOTE: TLVS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE HEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL MARRANTIES OF EVERY KIND AND NATURE, INCLUDING MARRANTIES OF MERCHANIABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SULTABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING LICENSE UNDER VALID PATENTS. APPROPRIATE WARNINGS AND SAFE HANDLING PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

ORIGINAL (Red)

********* FIRE AND EXPLOSION HAZARD DATA **************

FLASH POINT: F(C) (METHOD)

FLAMMABLE LIMITS: LEL

UEL

370(188) (ASTM D-92)

• 6

7 • C

FXTINGUISHING MECIA:

CARBON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER. IF GREATER THAN 1/2 LITER(PINT) INGESTED. IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN. HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)
STRONG OXIDIZERS
HAZARDOUS DECOMPOSITION PRODUCTS:
CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

CONDITIONS TO AVOID:

WILL NOT OCCUR

********************* SPILL OR LEAK PROCEDURE *************

ENVIRONMENTAL IMPACT:

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO CCAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

SCRAPE UP AND REMOVE. DISPOSE OF AT AN APPROPRIATE WASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS. AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE WASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

************** SPECIAL PROTECTION INFORMATION *********** EYE PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

IF PROLONGED OR REPEATED SKIN CONTACT IS LIKELY. OIL IMPERVIOUS GLOVES SHOULD BE WORN. GOOD PERSONAL HYGIENE PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

CTHER:

********************* SPECIAL PRECAUTIONS HANDLING: NO SPECIAL PRECAUTIONS REQUIRED.

*************************** TOXICOLOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)

0/10 RAIS DIED AT THIS DOSAGE LEVEL. SLIGHTLY TOXIC

CERMAL TOXICITY: (RABBITS)

0/10 RABBITS DIED AT THIS DOSAGE LEVEL. SLIGHTLY TOXIC

INHALATION TOXICITY: (RATS)

NOT APPLICABLE ---HARMFUL CONCENTRATIONS OF MISTS AND/OR VAPORS ARE UNLIKELY TO BE ENCOUNTERED THROUGH ANY CUSTOMARY OR REASONABLY FORESEABLE HANDLING, USE, OR MISUSE OF THIS PRODUCT. EYE IRRITATION: (KABBITS)

CAUSED NO SIGNIFICANT IRRITATION TO RABBITS.

SKIN IRRITATION: (RABBITS)

SLIGHTLY IRRITATING TO RABBITS. PRIMARY IRRITATION SCORE: .4/8

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRONIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: TSD330001) MHC: 1 1 NA 0 1 USB3-031E 321-74 APPROVE
8504

ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION PHONE: (212) 983-5594 4/13/83

OR!GINAI

MOBIL MATERIAL SAFETY DATA BULLETIN

MUBIL DIL CORPORATION ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT.

150 EAST 42ND STREET NEW YORK. N.Y. 10017 (USA)

PRODUCT IDENTIFICATION ************* MOBILMET NU '

SUPPLIER: MOBIL DIL CORP. CHEMICAL NAMES AND SYNONYMS: PET. HYDROCARBONS AND ADDITIVES USE OR DESCRIPTION:

HEALTH EMERGENCY TELEPHONE: (212)883-4411TRANSPORT EMERGENCY TELEPHONE: (809)424-9300 (CHEMTREC) OTHER DESIGNATION: (TRN 665992)

********* TYPICAL CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE:

ASTM R. 3 LIQUID

VISCOSITY:

AT 100 F. SUS 187.0

AT 40 C. CS

0008:

VISCOSITY:

AT 210 F. SUS

37.0 AT 100 C. CS

48.0

5.4

MILD RELATIVE DENSITY: 15/4 C

SOLUBILITY IN WATER:

Pri:

J. 334

NEGLIGIBLE

POUR POINT: F(C)

NΔ

MELTING POINT: FCC)

NA

-5(-21)

BOILING POINT: F(C)

>600(316)

CUTTING FLUID

FLASH POINT: F(C) (METHOD)

>360(182) (ASTM D-92)

VAPOR PRESSURE: MM HG 28C

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES INGREDIENTS **********

> 85

< 15

WT PCT TLV(TWA): MG/M3 PPM (APPROX)

HAZARDOUS INGREDIENTS: NONE

NON-HAZARDOUS INGREDIENTS: REFINED MINERAL OILS ADDITIVES AND/OR OTHER INGREDS.

CHLURINATED PARAFFIN WAX

NOTE: THE SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

INFORMATION GIVEN HEREIN IS OFFERED IN GOOD FAITH AS ACCURATE. BUT WITHOUT SUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL: ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL MARRANTIES DE EVERY KIND AND NATURE. INCLUDING MARRANTIES OF MERCHANIAHILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. NOTHING IS INTENDED AS A RECOMMENDATION FOR USES WHICH INFRINGE VALID PATENTS OR AS EXTENDING APPROPRIATE WARNINGS AND SAFE HANDLING LICENSE UNDER VALID PATENTS. PROCEDURES SHOULD BE PROVIDED TO HANDLERS AND USERS.

PAGE 2

ORIGINAL (Red)

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: F(C) (METHOD) FLAMMABLE LIMITS: LEL

> 360(182) (ASTM D-92)

• 6

7.0

EXTINGUISHING MEDIA:

CARSON DIOXIDE. FOAM. DRY CHEMICAL AND WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIREFIGHTERS MUST USE SELF-CONTAINED BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NONE

*********************** HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (IF ESTABLISHED)

5.33 MG/M3 SUGGESTED FOR OIL MIST

EFFECTS OF OVEREXPOSURE:

SLIGHT SKIN IRRITATION.

************ EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:

- FLUSH WITH WATER.

SKIN CONTACT:

WASH CONTACT AREAS WITH SOAP AND WATER.

INHALATION:

NOT EXPECTED TO BE A PROBLEM.

INGESTION:

NOT EXPECTED TO BE A PROBLEM. HOWEVER. IF BREATER THAN 1/2 LITER(PINT) INGESTED. IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN. HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. CO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

*********************** STABILITY: (THERMAL, LIGHT, ETC.) CONDITIONS TO AVOID:

STABLE EXTREME HEAT

INCOMPATIBILITY: (MATERIALS TO AVOID)

STRONG UXIDIZERS

HAZARDOUS DECEMPOSITION PRODUCTS:

CARBON MONOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR

CONDITIONS TO AVOID:

MOBILMET NU

Mobil

REPORT SPILLS AS REQUIRED TO APPROPRIATE AUTHORITIES. U. S. COAST GUARD REGULATIONS REQUIRE IMMEDIATE REPORTING OF SPILLS THAT COULD REACH ANY MATERIAY INCLUDING INTERMITTENT DRY CREEKS. REPORT SPILL TO COAST GUARD TOLL FREE NUMBER 800-424-8802.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

ADSORB ON FIRE RETARDANT TREATED SAWDUST, DIATOMACEOUS EARTH, ETC. SHOWEL UP AND DISPOSE OF AT AN APPROPRIATE MASTE DISPOSAL FACILITY IN ACCORDANCE WITH CURRENT APPLICABLE LAWS AND REGULATIONS, AND PRODUCT CHARACTERISTICS AT TIME OF DISPOSAL.

WASTE MANAGEMENT:

DISSOLVE WASTE IN A SOLVENT AND DISPOSE BY SUPERVISED INCINERATION IN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.

NO SPECIAL EQUIPMENT REQUIRED.

SKIN PROTECTION:

NO SPECIAL EQUIPMENT REQUIRED. HOWEVER, GOOD PERSONAL HYGIENF PRACTICES SHOULD ALWAYS BE FOLLOWED.

RESPIRATORY PROTECTION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

VENTILATION:

NO SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ACEGUATE VENTILATION.

OTHER:

***************** TOXICOLOGICAL DATA

ACUTE

ORAL TOXICITY: (RATS)

SLIGHTLY TOXIC(ESTIMATED) ---BASED ON TESTING OF SIMILAR PRODUCTS
AND/OR THE COMPONENTS.

DERMAL TOXICITY: (RABBITS)
NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR
THE COMPONENTS.

INMALATION TORICITY: (RATS)
NONTOXIC(ESTIMATED) --- BASED ON TESTING OF SIMILAR PRODUCTS AND/OR
THE COMPONENTS.

EYE IRRITATION: (RABBITS)

EXPECTED TO BE NON-IRRITATING. ---BASED ON TESTING OF SIMILAP PRODUCTS AND/OR THE COMPONENTS.

SKIN IRRITATION: (RABBITS)

MAY CAUSE SLIGHT IRRITATION ON PROLONGED OR REPEATED CONTACT.

---BASED ON TESTING OF SIMILAR PRODUCTS AND/OR THE COMPONENTS.

SUBACUTE AND MUTAGENICITY (SUMMARY)

CHRUNIC OR SPECIALIZED (SUMMARY)

OTHER DATA

FILE CODES:

(FILL NO: MTJ338001) MHC: 1* 0* 0* 0* 1* US83-0G3NONE APPROVE
8504
ENVIRONMENTAL AFFAIRS AND TOXICOLOGY DEPT. REVISED:
MANAGER OF PRODUCT SAFETY INFORMATION, PHONE: (212)883-5594 4/13/83